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DAILY DIGEST

Prepared in the Press Service, Office of Information, U. S. Department of Agriculture to present items of interest to agriculture and to agricultural workers. Views and opinions in these items are not necessarily approved by the Department.

Vol. LXXV, No. 21

Section 1

October 30, 1939

WESTERN RESEARCH LABORATORY

Secretary Wallace, in an address at the cornerstone laying of the new Western Research Laboratory of the Department last week, at Albany, California, said in part:

"This Western Laboratory will concentrate on finding new uses for Irish potatoes, alfalfa, wheat, and fruits and vegetables.

"The research in connection with potatoes will focus especially on the development of methods of processing which will permit long-term storage, which in turn will make the material available for industrial use at all times. The work will also stress methods of lowering transportation and storage costs on potatoes through dehydration and in other ways. Variations in the composition of potatoes under different storage conditions will be studied.

"As for alfalfa, the work will deal especially with its two potentially important components, the proteins and the pigments. Very little progress has been made in utilizing the proteins, chiefly because the usual process of drying this crop converts the protein into an insoluble form. If this difficulty can be overcome, alfalfa, containing 20 to 25 percent of this substance, would become an important source of cheap commercial protein.

"Protein of wheat will be included in the broad protein research program with the same relative objectives as those indicated for alfalfa.

"Another important part of the work will concern the possible utilization of fruits and vegetables in industry. This is an especially difficult problem because most fruits and vegetables contain such a high percentage of water and because of the relatively great cost of raw material in the form of the dried residues derived from them."

INCOME AND EMPLOYMENT

From two sources came reports recently of greatly improved conditions in the United States, says the New York Times. According to Secretary of Commerce Hopkins, the dollar income of Americans for the first nine months of this year jumped nearly \$2,000,000,000 above the corresponding period of 1938. At the same time the American Federation of Labor said that, owing to the war boom, probably 1,250,000 men had returned to work since August 1. Income payments so far this year amount to \$50,789,000,000, against \$48,733,000,000 in the same period last year, Mr. Hopkins said. "The seasonally adjusted index of income payments advanced from 85.4 (1929 equals 100) in August to 86.8 in September, the highest level in nearly 2 years and only 5 percent below the 1937 peak. The most important single factor in the advance was the sharp rise in agricultural prices and the attendant rise in cash income from farm marketings during September..."

Tree-Planting Experiments The Journal of Forestry (November) contains a note by C. H. Burrage, of the Tennessee Valley Authority, on large-scale tree-planting experiments near Norris, Tennessee, under the TVA in cooperation with the Appalachian Forest Experiment Station. "The project was initiated in the spring of 1937," it says. "Modern experimental design embodying the principles of replication and randomization and subject to statistical analysis was employed throughout. Of the eight experiments, four were designed to determine the relative suitability of thirteen species and ten mixtures for artificial regeneration on three aspects and three soil types. One experiment will investigate the effect of mixing black locust with four other species, two will test species for underplanting or interplanting young natural stands -- one understocked short-leaf pine, and the other thick sassafras stands. Sassafras, pure and in mixture with persimmon, commonly occupies abandoned fields in the Great Appalachian Valley and may preclude establishment of desirable tree reproduction. In addition to the last experiment, an eighth experiment was designed to determine what type of cultural treatment, if any, is necessary to establish successful plantations on such areas. Three species -- yellow poplar, white pine, and northern red oak -- were planted and the sassafras is to be removed at various times and combinations of times. A uniform spacing of six by six feet was used. After scalping, trees were planted by the centerhole method and a vegetative mulch applied. Mixtures were by nine-tree blocks, instead of by rows. In general, direct seeding of oaks and walnut was adopted with seedlings for other species. One-year stock was used with the exception of white pine which was 1-1..."

Community Forest Ernest O. Buhler, of the Forest Service, tells of a new use for a community forest, in the November Journal of Forestry. An abandoned farmhouse in the Onondaga County (N.Y.) Community Forest was remodeled into a lodge, "with kitchen, living room, easy chairs, fireplace, and sun porches. Outside are a shuffleboard, horseshoe ground, giant checkerboard, swings, teter-totters, and a magnificent view of the countryside. This lodge is reserved for the use of Sunday schools, women's clubs, church societies, and family reunions. They pay \$1 for the use of the entire lodge for one day -- not \$1 per person but \$1 for the entire society. The place is booked up for most of the 1939 season. A short distance from the lodge is a fenced-in enclosure containing pheasants. The local sportsmen's organization pays for feeding these birds and the necessary equipment to raise them. The county officials fence the ground on which to run them, and at the end of the year turn the birds over to the various sportsmen's clubs...On a hill are laid out a ski run, an ice skating rink, and a toboggan slide. Another lodge building was built from logs cut on the forest. This particular

lodge is rented out to civic clubs and organizations. They pay \$1 per club for the day. This house, too, is booked up for almost every week-end during 1939...The community forest has also an up-to-date fish hatchery. The fishermen in the county pay for the rearing of the fish and at the beginning of each season each fishing club is given a supply for stream stocking...Throughout the forest there are camping spots with fireplaces, bridle paths, hiking paths, nature walks for nature studies and other forms of amusement..."

FSA Medical Aid Program Medical care plans with which both physicians and families participating are well pleased, on the whole, have been worked out and put into operation in 25 states by the Farm Security Association, its chief medical officer, Dr. R. C. Williams, of the U. S. Public Health Service, reported. The farm families with incomes from \$20 to \$300 a year obtain medical aid by the pre-payment of \$15 to \$30 a year into a pooled fund. A bonded trustee is in charge of the pooled fund, and he pays all physicians' bills for the group as fully as funds will allow on a monthly, pro rata basis. This is the plan followed in most communities. There are a few variations, chiefly to meet local conditions. The families can go to any doctor they choose who is participating in the plan. Most of the plans include the following medical benefits: ordinary medical care, including diagnosis and treatment in the home or in the office of the physician; emergency surgery, emergency hospitalization, obstetrical care and ordinary drugs. Before any plan is established, the state medical association must approve it, Dr. Williams said. The county medical societies then work with the FSA to draw up an agreement for a particular area. (Science News Letter, October 28.)

North Dakota Harvest Labor "Last summer a field study was made in North Dakota of the demand for harvest labor, and of the working and living conditions of the men so employed, cooperatively by the North Dakota Agricultural Experiment Station, the Bureau of Agricultural Economics, and the Farm Security Administration," says R. M. Cullum, Farm Security Administration, in the Agricultural Situation (October). "This study covered laborers on 1,500 farms in 8 counties, and a sample of transients at a number of points of congregation...The study revealed that two out of every three paid laborers making the North Dakota harvest in 1938 had held farm jobs during the preceding 18 months. These laborers had worked on farms in more than three-fourths of the States. The most common wage for those hired by the month in the West North Central States -- where the majority had worked -- was \$30 with board in summer, and \$15 in winter. Few farm laborers had held jobs for more than 12 months -- probably not more than 1 individual in 15. Some had worked for board and room only. Enumerators interviewed 140 'regular hired men,' 628 'local hired harvest laborers,' and 1,475 'transients' -- a total of 2,243. Of

these, 118 'regular hired men' had held 288 farm jobs; 366 'local hired harvest laborers' 967, and 1,001 'transients' 2,115, a total of 1,485 individuals who, during the 18-month period covered, had worked at 3,367 farm jobs in 40 counties of North Dakota and 34 other States... The group hired by the year or season at monthly wages received wages higher than those of any other group, except during the winter. Few individuals in this group worked for board without pay. The number of men hired by the day was comparatively small, except for summer jobs which generally lasted but a short time..."

Electric Meter

President Roosevelt proudly exhibited at his press conference last week a simple and economical electric current meter which, he said, could be installed in farm homes at half the cost of the meter heretofore in use. The press conference was over, and reporters were starting to move out of the room, when the President, holding up the gadget, said they had forgotten to ask any questions about it, though it had been in plain sight. The meter, no bigger than the average rubber stamp, is built on the principle of the old bicycle cyclometer. The fact that he had it, he said, shows the effect of cooperation between Government and private producing and distributing power systems. The Rural Electrification Administration, he declared, obtained the idea from the Ontario Hydro Electric Co. Another thing the Administration is working on, he said, is an arrangement whereby the honest farmer will be allowed to read his own meter each month. Under this plan the farmer's meter would only be inspected every six months instead of every month. The upshot would be that the cost of meter readings and mailing out bills would be reduced from an average of 15 cents to 3 cents per month. (Washington Post.)

War Injures Trade Pacts

"The world's efforts of the last seven years to break down trade and currency barriers have been nullified by thirty-three panicky nations which, in their anxiety to protect their trade, raw materials and currencies, have established various controls," says a report in the New York Herald Tribune. "Of the thirty-three countries now operating under war control measures eleven had signed reciprocal trade agreements with the United States since 1934. Seven of these, in Europe, rank among the leading commercial nations of the world, while the other four are on the North and South American continents...The countries which had signed reciprocal trade agreements with the United States and now have instituted control measures are France, Belgium, the Netherlands, Switzerland, Sweden, Finland, Brazil, Costa Rica, Haiti and the British Empire, which includes Canada, Australia, New Zealand and its mandated territory...The controls established by European nations in this war are similar to those they put into force in 1914-'18. However, the last war ended the period of free commercial intercourse between nations, and led to the creation of tariff walls and monetary controls..."

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Section 1

October 31, 1939

CIVIL SERVICE HEARINGS

Hearings on President Roosevelt's Civil Service reform program will begin before the Reed committee in the Supreme Court Building at 9:30 a.m. tomorrow in Washington. Headed by Associate Supreme Court Justice Stanley F. Reed, the committee has been working for many months to gather data bearing on a program which would make the government a "career" place for employment. President Roosevelt created the committee last February to study a proposal that several thousand positions in the government, now exempt from Civil Service, be brought into that category. Among phases studied by the committee have been recruitment, testing, selection, promotion, transfer, removal and reinstatement of workers in the professional, scientific and higher administrative brackets of government departments. (Washington Times Herald.)

HARMFUL COSMETICS

Sixty-five varieties of eyelash dyes have been forced off the market since the new food, drug and cosmetic act went into effect in June 1938. Dr. Paul B. Dunbar, assistant chief of the Food and Drug Administration of the Department of Agriculture, made that assertion yesterday at the fifty-fifth annual meeting of the Association of Official Agricultural Chemists in Washington. The dyes seized contain chemicals that not only harm the eyelashes, said Dr. Dunbar, but seriously menace the eyesight. Considerable progress has been made, said Dr. Dunbar, toward ridding the market of dangerous cosmetics, drugs and spurious curative devices. Dr. Dunbar urged the chemists to forge forward in devising new methods of analysis which would aid in enforcement of the law. (Washington Times Herald.)

FCIC WHEAT RESERVE

A wheat reserve of 10,458,501 bushels has been acquired by the Federal Crop Insurance Corporation through its branch offices in Chicago, Kansas City, Minneapolis and Spokane to cover premiums paid by nearly 300,000 growers of winter wheat to insure their 1940 crops against all unavoidable hazards. Of the wheat in storage in 68 cities in 16 states, 1,110,000 bushels were handled through the Chicago office, 5,911,491 through Kansas City, 3,284,652 through Minneapolis and 152,358 through Spokane. (Press.)

Feed Grain Supplies Supplies of feed grains will be more than ample to meet livestock requirements during the coming fall, winter, and spring months, according to the Bureau of Agricultural Economics. The total supply on October 1 -- including stocks of corn and oats and the indicated production of corn, barley, and grain sorghums -- was about 108 million tons as compared with 104 million tons in 1938 and 101 million tons for the 1928-32 average. This supply figure includes corn under seal and corn held by the Government. Assuming an increase of about 7 percent in the number of grain-consuming animal units on farms during 1939, the supply of feed grains per animal is about 4 percent smaller than the supply last year, but 8 percent above the 1928-32 average. Excluding corn already under seal or held by the Government, the total supply of feed grains available per grain-consuming animal unit is roughly about the same as during the pre-drought period.

Uniform Food Laws Urged Speakers at the annual conference of the Association of Food and Drug Officials of the United States recently pleaded for greater uniformity among states in food and drug administration, says the Northwestern Miller (October 25). "Scoring the enactment in the last 10 years of a 'myriad of state laws setting up barriers to free trade between states,' Gen. Sanford H. Wadhams, chairman of the Connecticut Committee on Inter-governmental Cooperation, said: 'Unless our states become reasonable in their regulation of food products, remove restrictions which serve only to irritate producers, shippers and dealers and do not protect consumers against fraudulent practices and impure goods, and abandon the economically suicidal policy of erecting trade barriers, such powers as they have and should have will be transferred to the federal government.' Adoption of uniform packages for foodstuffs through the country was urged by Alex Pisciotto, director of weights and measures of the New York City Department of Markets."

Fire-Trench Machine Trenches are used not only in the deadly warfare of man against man, but in the more useful strife of man against fire. Ordinarily, the wide, shallow trenches that break the forest fire's line of advance are scooped out by hand labor with spades and shovels -- backbreaking work. The U. S. Forest Service has a new trench-digging machine that will make as much as 50 feet of fire-trench a minute -- a job for 300 men under some conditions. It is the invention of Jim Bosworth, assistant supervisor on the Kanisku National Forest in Idaho. The Bosworth trencher is mounted wheelbarrow fashion, with a heavy bicycle wheel to carry the 96-pound load of a small gasoline engine and the series of rotating bars or "hammers" that throw the soil aside. One man can push it, and if need be another can harness himself in front and pull. (Science News Letter, October 28.)

Hybrid Sugar Experiments with hybridization of plants other
Beet Tests than corn are being made and progress is being reported,
 says an editorial in the Southern Planter (October).

"Tests with hybrid sugar beets being conducted in Colorado have been promising. The new seed is being developed in an effort to increase yields and develop beets that are resistant to the leaf-spot disease which causes substantial losses to growers in many districts. Specialists of the United States Department of Agriculture say that one hybrid is producing at the rate of 5,595 gross pounds of sugar per acre compared with 4,987 pounds for the standard variety of beets in three Northern Colorado tests. A field test of this same hybrid resulted in the production of 5,800 gross pounds of sugar per acre, compared to 5,295 pounds from the standard type. In still another test, the new seed produced practically the same tonnage of beets from four irrigations that the regular seed did from six."

Increasing "Dairymen are watching developments in the St.
Milk Sales Louis, Missouri, milkshed as a demonstration of how the
 consumption of their product can be increased without
any decrease in the price they get for it," says F. J. Keilholz, extension editor, University of Illinois, in Country Gentleman (November). "In midsummer of this year while milk sales were increasing 6.4 percent for 136 markets all over the county, consumption in St. Louis increased 16.8 percent. Class 1 sales in the market were a little more than 18,000,000 pounds in July of this year as compared with 15,400,000 pounds a year ago. The St. Louis district has been under a Federal milk marketing order for the past six years...Three things are cited by Dr. R. W. Bartlett, milk-marketing specialist of the University of Illinois, as responsible for the increased consumption in St. Louis. These are improved quality, bargain prices and higher consumer incomes. On the strength of these three factors, consumers in the city bought seven quarts of milk in July of this year for every six quarts they bought a year ago. This not only absorbed a July increase in production of 2,300,000 pounds but also 300,000 pounds of milk which might otherwise have been sold at the surplus price...Health officials a year ago publicly announced that under the present setup of sanitary regulations, St. Louis consumers could be assured of getting milk of the highest quality. Most important, however, is said to be the sale of milk at bargain prices. Instead of paying 13 cents a quart as they did in July, 1938, consumers this year could buy gallon jugs of milk at stores as low as 36 cents or 32 cents, while at many stores two-quart bottles could be bought for 16 or 17 cents. Thirty-six and 40 cents a gallon were the usual wagon prices in July."

Milk November Fortune contains two articles on Milk:
 Milk in Chicago; and Let 'em Drink Grade A (the milk
industry).

Changes in Farm Practice "Farming is no longer just an occupation but a business," says an editorial in Farm and Ranch (November), "and the man who stays in it and succeeds must take advantage of every aid available. Not only must he read intelligently, and understandingly, but be able to select from a mass of information the things that fit his needs. He should also consult with his county agent and plan his farm work in such a manner that he will have profitable employment every working day in the year. Those farmers who have depended upon cotton alone may just as well cease hoping that the time will soon come when they can plant all their acres to the staple. If all government restrictions were removed after this crop is harvested, it will be a long time, if ever, when cotton can be produced profitably on a large scale. The days of one-crop farming are over in the Southwest...Something new in agriculture comes up every week and every month..."

Veterinary Contract The Journal of the American Veterinary Medical Association (November) prints a model contract that may be entered into between the federal government and veterinarians engaged to supply veterinary services to farmers to whom money has been loaned by the government for the purpose of purchasing farm equipment and farm animals. "The document is the model compiled and agreed upon by the Ohio State Veterinary Medical Association and the representatives of the Farm Security Administration in that state," it says. "The debates over the kind of agreement veterinarians can afford to make for this type of contract service have been numerous, heated, and have never before ended in a manner satisfactory to both parties...The Ohio plan is probably that solution, as it was studied at length by both sides before adoption."

Poultry Mortality In a paper on poultry mortality, in the Journal of the Veterinary Medical Association (November) L. E. Boley, Illinois State Department of Agriculture, and Robert Graham, Illinois College of Agriculture, report a study made at the college laboratory. A summary says: "Mortality studies were made on one flock of approximately 1,500 hens and pullets over a period of four years. Sick and dead birds were autopsied daily with microscopic, histopathological and bacteriological examinations supplementing some of the autopsies. Losses in the flock were recorded (figures = per cent): 1934-35, 37.87; 1935-36, 22.2; 1936-37, 27.04; and 1937-38, 47.099. In the flock studied it appears that leucemia and internal parasites are the important factors in the mortality. The incidence of leucemia as observed at autopsy increased from 25 percent in 1934-35 to 53.1 percent in 1937-38. Seventy-eight percent of the total mortality occurred in the pullets of the flock during the year 1937-38, while 79 percent of the lesions of leucemia were observed in the pullets. A classification of the disease entities diagnosed in 15,234 poultry specimens submitted to the division of animal pathology and hygiene, University of Illinois, over a period of $7\frac{1}{2}$ years is recorded" (in the paper).

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Section 1

November 1, 1939

WEATHER AND CROPS

Very helpful moisture was received during the week in Central and Northern States from the Mississippi Valley eastward, says the weekly weather and crop bulletin. Moisture is now sufficient for present needs quite generally from Kentucky and North Carolina northward. There were helpful showers also in Missouri, extreme southeastern Kansas, much of Oklahoma, and parts of Texas. In other parts of the trans-Mississippi area there was little or no rainfall and droughty conditions persist. In fact, in a large mid-western area extending from eastern New Mexico and western Texas northward over the Great Plains only widely scattered stations reported a measurable amount of rainfall.

In Kansas droughty conditions continued; seeding has slowed down, but is now completed in eastern counties. In the west where, so far, wheat has been seeded in dust, farmers are still waiting for rain. Little has germinated in the western third of this State, but in most of the east plants are showing in drill rows. Nebraska continues too dry for germination in many localities and much wheat has not sprouted; even in favored localities stands are spotted, and it is now becoming rather late for germination and growth sufficient to survive the winter even if good rains come immediately. In the principal wheat-producing sections of Iowa, the western third, there was little or no rainfall, growth is slow and stands have not improved. In the Pacific Northwest, including western Montana, Idaho, and Washington, beneficial moisture occurred, amounting in the wheat belt of Washington up to half an inch; additional seeding is in progress and wheat previously sown in dust can now germinate if temperatures are favorable.

AGREEMENTS FOR MILK

E. W. Gaumnitz, director of Division of Marketing and Marketing Agreements, addressing yesterday the New England Milk Producers Association, said in part: "The Marketing Agreement Act authorizes Federal-State cooperation in the development and administration of programs regulating the handling of agricultural commodities. Such arrangements for milk are now in effect between the Federal Government and four States. Closer coordination between the work of State agencies and that of the Federal Government in dealing with producers' marketing problems is becoming more evident... Over 40 marketing agreement programs are in effect for milk and dairy products, and for other farm products such as fruits, vegetables, nuts and hops. During the last year these have affected approximately 1,300,000 producers."

Improvement in Cotton Considerable improvement in the cotton situation during the past month is reported by the Bureau of Agricultural Economics. Increased domestic cotton consumption, substantial improvement in the competitive price position of American cotton in foreign markets, and greatly increased exports of American cotton were important developments during the month. Mill consumption of cotton in foreign countries appears to have changed comparatively little. A near-record world supply of nearly 50 million bales of cotton is indicated despite the reduction in the October estimate of the United States crop. Of this total, about 26 million bales are American cotton. The daily rate of cotton consumption in the United States in September was 10 percent above August, and apparently increased still further in early October. Consumption in September was the largest on record for that month. It was equivalent to an annual rate of about 7-3/4 million bales, which is nearly 1 million bales larger than consumption last season and nearly as large as the record high consumption of 7,950,000 bales in 1936-37.

Villages for Farm Workers Construction of 16 villages in the agricultural belt of Montgomery County, Maryland, to provide low-rent housing for white and Negro farm workers and their families won approval recently with the allotment by the U. S. Housing Authority of \$800,000 to get it started, says a report in the Baltimore Sun. The project is the first of its kind undertaken in this country. The plans call for the construction of about 800 houses. Rentals will run from \$6 to \$12 a month. The villages, according to the announced program, would be established in various sections of the county, from eight to ten miles apart. Housing authority officials said the rentals would be on the basis of one-fifth of income; that is, the incomes of the tenants must not be in excess of five times the monthly rentals. Exceptions would be made, however, it was said, in the case of large families. Also, it was explained, no tenants would be accepted for residence in the villages unless they were living at the time of application for accommodations, in "exceptionally" low-standard shelters.

Food Stamps, FSA Houses Business Week (October 28) contains a short article on the food stamp plan in Shawnee and in Pottawatomie County, Oklahoma. "Because the Pottawatomie County experiment is the only one which includes an entire county," it says in part, "it involves a unique stamp distribution system. A mobile stamp unit is set up in a truck and makes the rounds of every town in the county on a four-day schedule each month, to sell the books of combined orange and blue stamps. Additional books can be bought in Shawnee during the month. The books of blue stamps only, distributed to the lower relief brackets, are all mailed out once a month."

The same periodical contains a 1-page article and a page of photographs, depicting the Farm Security Administration low-cost farm homes.

Texas Cotton Improvement "The Texas Cotton Committee, that is pursuing its long-time campaign for rehabilitating the industry, will welcome so able and experienced a recruit as M. C. Jaynes, who lately became the Texas Extension Service's cotton specialist," says the San Antonio Express. "Cooperating with the Bureau of Plant Industry and the several organizations concerned with aiding the cotton farmer, Mr. Jaynes will devote his attention primarily to advancing the single-variety cotton community movement. His objective -- which is also that sought by the state-wide committee -- will be to bring about improvement in the Texas product's quality, texture and staple-length. Tests so far have demonstrated the single-variety community's efficacy in serving that purpose. For example, last season the Victoria County communities participating in that program sold their excellent cotton -- that had been carefully handled, scientifically ginned and wrapped in waterproof duck bagging -- at premiums ranging from \$8 to \$10 a bale over run-of-the-market stuff... This year 415 one variety cotton communities have enrolled 27,000 farmers, cultivating 997,000 acres. That is 11 percent of the total Texas cotton area this year, under the AAA crop-control program..."

Farm Price Indexes The average of prices received by farmers in mid-October was slightly lower than a month earlier, the Agricultural Marketing Service reports. But at 97 percent of pre-war, the all-commodity index was 2 points higher than the October 1938 average. Prices of grains and meat animals failed to hold the levels reached in their spectacular rise in early September, and by October 15 had lost about one-third of their gains. Chickens and eggs, and dairy products, however, made substantial seasonal advances, holding the all-commodity index within 1 point of the September figure. By October 15, grain prices had declined 6 points and meat animals 5 points from mid-September levels. The grain price index, however, was still 17 points higher than a year ago. Cotton and cottonseed prices declined during the month, but averaged slightly higher than a year earlier. Local market prices of dairy products advanced 5 points during the month, and also averaged 5 points higher than on October 15, 1938. Chicken and egg prices were 6 points higher than a month ago, but were 16 points lower than a year ago.

Poultry Charts "The success of the poultry cookery charts, prepared by the U. S. Bureau of Home Economics, were assured the moment they were produced," says the U. S. Egg and Poultry Magazine (November). "The charts should be useful for the retailer as a display and to suggest different ways of serving poultry meat. In home economics classes they should be a simple, effective way to supplement poultry cooking instructions... There are eight charts in the set, size 20 by 30 inches, printed in black and white on heavy paper, price 50 cents by set only, procurable from the Superintendent of Documents, Government Printing Office, Washington."

Conservation
Education

The Educational Conservation Committee has drafted a bill to be filed with all state legislatures to provide for the teaching of conservation in the schools. It is to be hoped that this legislation will be given thorough consideration by legislative bodies and serve to focus attention on the importance of this subject in the school curricula. At the moment there are varied opinions as to the best methods of approach. They vary from prescribed courses in conservation to inclusion of conservation ideas in a number of the present studies. Several independent studies of the question are now being made. (Nature Magazine, November.)

Plant
Breeding

"Recent Progress in Plant Breeding," by E. B. Babcock, University of California, is the leading article in the November Scientific Monthly. In the concluding paragraph he stresses the significance of current research in the field of physiological genetics, and continues: "It is safe to say that the relations between the chromosomes and the cytoplasm, on one hand, and the morphological and physiological characters of the plant, on the other hand, seem likely to be more clearly understood in the near future. New light on the genetics of size and of growth and form of the organism and its parts may lead to a better understanding of heterosis and to a more successful utilization of this phenomenon. Research on the genetics and physiology of development in plants is just getting under way, but it gives promise of future enlightenment which will have an important bearing on breeding for such qualities as yield, chemical composition and resistance to cold, drought, diseases and pests. The artificial distinction between 'pure' and 'applied' research can no longer be maintained in general; it seems certain that henceforth scientific research on plants and scientifically practical plant breeding will go hand in hand in the service of society."

Other articles in the same periodical are: "The Rural Community as a Science Laboratory for City Children" by N. Eldred Bingham, Columbia University; "The Pan American Highway--II" by Herbert C. Lanks; "To What Extent Is a Science of Man Possible?" by Frederick Osborn, American Museum of Natural History; and "Baking Technology and National Nutrition" by James A. Tobey, American Institute of Baking.

Minnesota
Plum 218

No. 218 is one of the new plums at the Minnesota station's fruit-breeding farm. During several years of testing, it has proved itself in earliness, hardiness, disease resistance and size and yield of fruit. A dessert plum, it is a delicate red when ready to pick. Nurseries have obtained propagating wood of the variety and are increasing their supply. (Successful Farming, November.)

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Section 1

November 2, 1939

LATIN TRADE PROMOTION Latin-American diplomats and United States businessmen inaugurated a campaign yesterday to stimulate United States purchases of Latin-American goods and agreed to establish a huge market place in New York City, says an Associated Press report. The merchandizing center, probably to be located in Rockefeller Center, would afford businessmen from both continents a place to meet and show their wares. Edward J. Noble, Under-Secretary of Commerce, at a press conference after the meeting, sponsored by the Commerce Department, explained that United States purchases from Latin America were emphasized because a high volume of orders from Latin America--estimated at about \$250,000,000--had switched to this country because of the war. Germany alone, now cut off by the Allied blockade, sold about a quarter of a billion dollars worth of merchandise in Latin America last year. Noble said business between the Americas would be seriously disrupted if the United States sold a great deal more merchandise in Latin America without balancing the sales with purchases.

TOBACCO QUOTAS The Department today announced the final results of the flue-cured tobacco marketing quota referendum held October 5. Out of an estimated total of 300,000 flue-cured tobacco growers eligible to vote, 250,671 cast ballots in the referendum. Of this number 225,606, or 90 percent, voted in favor of the marketing quota, and 25,065, or 10 percent, were opposed to the quota. As a result of the votes, the flue-cured tobacco marketing quota, proclaimed by the Secretary on September 25, will be in effect during the coming marketing year which begins on July 1, 1940. When the amounts required for increases for small producers are added to the original quota of 618,000,000 pounds, it will make a total quota of approximately 660,000,000 pounds.

"TEST TUBE" RABBIT The first fatherless rabbit, a doe born of an egg fertilized in a test tube with a simple salt solution, which is also motherless in the sense that the rabbit that give it birth merely served as a living incubator for an ovum taken from another species of rabbit, was shown for the first time yesterday at the New York Academy of Medicine. The first mammalian creature to be brought into the world as a result of a synthetic parthenogenesis is a large lively chinchilla, whose living incubator mother was a pure albino, and is the work of Dr. Gregory Hincus, of Clark University, who began his epoch-making studies at Harvard. (New York Times.)

Cornhusking
Contest

Nebraska Farmer, in an item on the National Cornhusking Contest, says: "Scene for this gala farm event of November 3 is a 40-acre field of No. 313 hybrid corn which is expected to yield 60 to 75 bushels to the acre...More than 150,000 persons are expected to attend...A substantial fund was provided by the state legislature to help make this show a feature well worth seeing. It is doubtful whether any other sporting event in the country will attract more attention than the 1939 National Cornhusking Contest. Color newsreels of the field are ready for distribution. Action of the contest will be broadcast over NBC's Farm and Home Hour on a chain of more than 100 radio stations. This year's contest is sponsored by Kansas Farmer Mail and Breeze, a member of the National Cornhusking Contest Association. Each state represented in the association is allowed to enter two contestants. The state champions are chosen in state contests which feature the meeting of winners in county contests throughout the various states. The national contest rotates among the states from year to year..."

REA Tours
to Farms

Joseph S. Rogers, REA Information Division, in Rural Electrification News (October) describes a day with the REA Farm Equipment Tour, now in its second year. "Activities start at 6 o'clock in the morning," he says. "National manufacturers arrange their trailers outside the tents, each trailer equipped with one or more appliances which mean more money to the farm. Pumps, feed grinders, corn shellers, brooders, portable irrigation systems, milkers and milk coolers, ensilage cutters, silo fillers, electric hot beds, and other equipment are attractively displayed. Inside the main tent, half of which is given over to an auditorium equipped with a public-address system, are hundreds of appliances for the farm homes -- electric ranges, refrigerators, hot-water heaters, lighting systems, radios, ironers, washing machines -- in fact, every kind of an electrical appliance. At 6:30 a.m. the REA high-line is tapped and run to all the displays...Many farmers leave their fields for the day to get knowledge of electrical equipment which will pay important dividends later. Many small businessmen close their shops so that they and their employees can see this show. At 10 a.m. the lectures for farm women begin. An REA home-electrification specialist gives a talk on kitchen planning and proper lighting. She demonstrates a light meter, shows the difference between good and bad lighting, stresses the importance of having plenty of convenience outlets...From 12:30 p.m. until 2 o'clock, while having lunch at a refreshment tent operated by a local church organization, farmers and their wives discuss what they have learned...At 2 p.m. there is another demonstration in the tent on the benefits of electric cookery and refrigeration...At 7:30 o'clock in the evening there is another arranged program...The program ends at 11 p.m. with the showing of a motion picture..."

Peat For Young Trees "In transplanting two-year-old apple stock from the nursery to the orchard, a much more vigorous and rapid growth results and fewer trees are lost when peat is mixed with the soil when the hole is filled," says S. W. Edgecombe, Iowa State College, in the Country Gentleman (November). "This has been found to be consistently true in extensive experiments conducted in different sections of Iowa by the horticultural department of Iowa State College. The practice is to use one gallon of ordinary granulated peat to each tree. After placing the tree in the hole, the roots are first covered with some of the soil which was removed from the hole. This is to prevent the roots from coming into direct contact with the peat, which might possibly result in burning. The gallon of peat is then mixed with the remainder of the soil and the hole filled. The ratio of peat to soil is about one part to twelve. Watering at the time of transplanting is conducted as usual. The peat is advantageous to the young trees in both wet and dry years. In dry seasons it holds moisture; in wet seasons it prevents packing of the soil, which results in greater aeration to the roots; thus faster and more vigorous growth results under either weather condition."

Forest Fire Control Pacts All but seven of the States now have forest-fire protection agreements with the Department. Colorado was the forty-first to sign up. Of the seven, Iowa, Kansas, Nebraska, and North Dakota have little forest land. In the other three, Utah, Wyoming, and Arizona, most of the remaining forest land is in national forests and not primarily a State responsibility. Under these agreements the Federal Government matches State expenditures for fire protection to the degree that the funds available permit. In 1938 the Federal contribution was about \$2,000,000 and the total by the States about \$7,000,000. In 1937 about 94 percent of all the forest acreage burned was in areas not yet under joint protection. More than 11 percent of all the unprotected forest land was burned over in that year. Protection costs in most States amount to only a few cents an acre each year. State and Federal foresters estimate that it would not cost more than 2 cents an acre to protect more than 6,000,000 acres of forest lands in Colorado. The area to be covered the first year under the agreement will be less than half a million acres.

Chopped Hay Devices "The widespread interest in chopping soybean hay has brought to the market two products designed to eliminate heat in the mow and to detect it should it occur," says Successful Farming (November). "A thermometer at the end of a 12-foot rod is convenient for checking temperatures. When there is a separation of cuttings, the heavier and wetter portions are inclined to heat first. A special distributor head prevents such separation."

Farm "Experiments conducted at the Alabama Agricultural
Ponds Experiment Station have demonstrated that small ponds
 may be built on many farms by farmers themselves and,
if properly managed, these ponds will produce better fishing than can
be found in the best of our lakes and streams," says H. S. Swingle,
Alabama Experiment Station, in Southern Agriculturist (November). "In
addition, farm ponds may be utilized for watering of stock, the irriga-
tion of the farm garden, and as a swimming hole. Farmers in the South-
eastern states have been quick to take advantage of these experiments;
on Alabama farms alone there are now about 2,000 of these small ponds
and more are being built at the rate of approximately 200 each year...
If an acre pond is properly fertilized (the December issue of Southern
Agriculturist will carry an article by P. O. Davis, Director Alabama
Extension Service, in which the breeding and feeding of fish will be
discussed) from 150 to 250 pounds of fish can be removed annually. For
the average farm family, therefore the farm pond should have an area
of between 1 and $1\frac{1}{2}$ acres. Ponds less than $\frac{1}{2}$ acre in area are too small
for use as fish ponds, while the maximum size any family could econom-
ically use is approximately 3 acres..."

Turkeys "It is a new idea to rent turkeys but it was done
For Rent this year by a Wyoming owner," says an editorial in the
 Utah Farmer (October 25). "When a nearby farmer wanted
his fields cleaned of grasshoppers he hired the turkeys, paying so much
each day until the land was free of the hoppers. In addition to wages
for these turkeys, they were fattened at the same time by eating the
grasshoppers. If they are taken any distance from home they go in a
truck. A herder, a tent and a portable roost go with them."

Railroad Class I railroads of the United States had a net
Income Up railway operating income in the first nine months of
 this year of \$355,009,889, compared with \$205,444,845
in the corresponding period last year, the Association of American
Railroads has announced. In September it was \$86,435,178 compared
with \$50,506,298 in the same month of last year. Gross revenues in
the nine-month period were \$2,862,079,851 compared with \$2,573,535,021
in the same period last year, the report stated. This was an increase
of 11.2 percent. (Press.)

State Tax An increase of 18.5 percent in State tax collections
Collections in 1939, compared with 1937, was indicated in a special
 study made by the Census Bureau. The preliminary report
covers forty-three States whose fiscal years ended between December 31,
1938, and August 31, 1939. A total of \$3,169,972 in taxes was collected
by the forty-three States. Gasoline sales taxes, representing 20.4 per-
cent of the total, and unemployment compensation taxes, 20.6 percent,
were the leading revenue producers. Receipts from gasoline taxes rose
30.4 percent from 1937, and revenue from license taxes on specific busi-
nesses was up 30 percent for the same period. (Press.)

DAILY DIGEST

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Vol. LXXV, No. 25

Section 1

November 3, 1939

TVA REDUCES POWER RATE

A reduction in the Tennessee Valley Authority's "yardstick" power rate to consumers was announced yesterday by David E. Lilienthal, TVA vice chairman. It is the first reduction since the rate, designed by the Administration as a standard to bring private rates down, was promulgated in the fall of 1933. Lilienthal revealed, however, that the lower rate is applicable for the time being to only about 2,000 of the 340,000 consumers of TVA power. These consumers are members of a cooperative organization in Alocorn County, Mississippi. About 500 of the consumers are farmers served by 100 miles of rural power lines built by the cooperative. The new rate is 2 1/2 cents per hour on the first 50 kilowatt hours of power used per month by residential consumers. The old rate was 3 cents. (Washington Post.)

COTTON SALES FOR EXPORT

The Department of Agriculture reported yesterday that sales of cotton and cotton products under the export subsidy program in the three months ended on October 31 totaled 3,358,000 bales. Included were cotton products equivalent to 159,000 bales. Under the subsidy the department pays a bounty of 1.5 cents a pound on cotton sold abroad. Cotton actually exported in the three months totaled 1,608,000 bales, compared with 1,090,000 in the same period in 1938. (A.P.).

FOOD STAMPS EXTENDED

Secretary Wallace has announced that Providence, R.I., and Bismarck and Mandan, N.D., have been selected for the food stamp plan. Providence, with a population of approximately 252,000, has about 13,000 relief cases, representing around 41,000 individuals. Five thousand relief cases are employed on WPA projects, while the rest are divided among social security cases and state and local unemployment relief. The Bismarck area will cover Burleigh County, including the city of Bismarck, while the Mandan area will cover Morton County, including the city of Mandan. These two areas have a population of approximately 44,000. It is estimated there are in the areas about 2,000 relief cases, representing about 6,000 individuals.

Low-Cost
Housing

The Journal of Home Economics (November) contains a paper by Martha Regin, of the U. S. Housing Authority, on the role of home economists in low-rent housing projects. Under the U. S. Housing Act, she says in part, projects aided by the U. S. Housing Authority "shall be available solely for families whose net incomes at the time of admission do not exceed five times the rent (including costs of all utilities but refrigeration), except where families have three or more minor dependents, when the ratio can be six to one. In addition, in order to rehouse families in the lowest income group, it is urged that every effort be made in the local program to confine tenancy in low-rent housing projects to an income group below the maximum income limits set by law. To provide a valid basis for establishing a potential pool of tenants at the lowest feasible income level calls for an analysis of reliable local data from all sources on family sizes, incomes, rents paid, occupations, etc., of families living in areas of substandard housing. The home economist who has at her command the available facts along these lines about her own community is in a position to assist the local housing authority in establishing such local maximum limits. It is apparent that no satisfactory scale of minimum income limits can be arbitrarily established for determining the adequacy of family income for admission to a project, ^{and} that each application must be carefully considered on an individual basis..."

One-Variety
Cotton Plan

"Results thus far from the export of one-variety cotton have been highly successful and have led to plans for continuing the practice on a larger scale," says an editorial in the Dallas Morning News. "Foreign spinners have commented with much favor on the uniform lint produced by Texas communities that have joined in raising a single high-grade variety and have given special attention to ginning and packaging for export. The bales have been covered completely with new cotton bagging. Efforts to market 30,000 bales of one-variety cotton from this year's crop, compared with 3,800 from last year's, will give a much broader basis for determining the value of improvements in growing and marketing. Suggestions of European spinners, including one for use of fabrics of closer mesh weave in bale covers, are being taken into consideration. European complaints against the low quality of much of this country's export cotton and against carelessness in its wrapping and handling have been common for years. This situation has been one of the factors leading to loss of profitable markets to competitors in other lands. Remedial measures now being taken here may go far in reviving a preference for American lint. Uniform high quality, combined with careful ginning, baling and wrapping and handling, is bound to meet with favorable response among buyers."

**Egg-Cooling
Systems**

"Three years ago, only 3 percent of the New York bound eggs taken from the Pennsylvania egg auctions made the top quality grade," says Welch Richardson in Country Gentleman (November). "In 1939, according to John E. Nicholas, Pennsylvania State College agricultural engineer, the amount of top-quality eggs went up to 24 percent. The rise was largely due to pre-cooling of eggs on the farm...There are two systems in general use, both practical. One is a simple framework about six feet high, over which is draped a burlap or canvas cloth. Racks inside support the eggs, and a stream of water from a perforated pipe drips along the burlap. The evaporating water takes up heat and cools the eggs. The excess water holds the humidity up. In the tunnel cooler, an electric fan blows air through thin strips of wet blotting paper over the racks of eggs. It is a little more efficient than the tower cooler, being less dependent upon room temperature or natural air movements. Also, fungi growths are far less than on the burlap tower."

**Potato
Breeding**

"The Rhode Island Experiment Station has cooperated with the Bureau of Plant Industry in testing potato seedlings developed by the Federal department," say T. E. Odland and T. R. Cox, of the station, summarizing an article in the American Potato Journal (October). "An aggregate of 164 lots of seed stock has been tested in replicated short rows and more than 400 smaller lots as tuber units or for special studies during the last 10-year period. The Chippewa has proved one of the most promising of the new varieties. It is a good yielder, has a high percentage of marketable tubers, and is attractive in appearance. In cooking quality, however, it is somewhat less desirable than the Green Mountain under local conditions. The Katahdin is similar to the Chippewa in length of growing season, appearance, and cooking quality. However, it has not been satisfactory from the standpoint of yield and has, therefore, been discontinued in these tests. The Houma is a medium maturing new variety that shows promise for our conditions. It has a desirable appearance, good cooking quality, and also showed up well in yield. The Golden, a yellow-fleshed seedling, lacked satisfactory cooking qualities and produced too high a percentage of No. 2 and un-marketable tubers to be desirable. The Sebago is outstanding in blight resistance. It also seems to be resistant to scab. It is a good yielder of high quality potatoes. It is one of the most promising of the seedlings tested. The scab test indicated that a number of the seedlings, in addition to the Sebago, are much more resistant to scab than are Green Mountains..."

**Cold Locker
Associations**

Quick Frozen Foods (November) reports that Illinois, Iowa, Wisconsin, Oregon, Washington, Ohio and Michigan now have locker plant associations. To date the function of locker associations is principally to disseminate information rather than to attempt buying cooperatively, it says.

N.H. Restricts Vitamin Sale Operators of "cut rate stores," department stores, groceries and similar non-drug outlets have been warned by the New Hampshire State Board of Health that sales of vitamin concentrates in such stores will be deemed a violation of the pharmacy law, says a Concord report in Food Field Reporter (October 30). The action of the board is based upon the pharmacy law which defines "potent drugs" as "all substances, the average adult medicinal dose of which is less than 60 grains of solid, or 60 minims of liquid V," which would include vitamin concentrates. Potent drugs, as defined, must be dispensed by pharmacists.

Soybeans for Export The American-grown soybean has cut heavily into the export markets formerly dominated by its Manchurian cousin, says the Wall Street Journal. Foreign consumers thus far this year have taken approximately 1,000,000 bushels of U.S. beans, or about five times the average annually for the past five years. American ports have cleared only about half of the total purchases. Enlargement of the foreign demand has been largely instrumental in raising domestic prices 25 to 30 cents a bushel since mid-August. On the last 5-cent advance, however, it has been noticeable that export demand has been less keen. Based on past performance, it is admitted that domestic consumers can absorb all of the record 90,000,000 crop now being harvested. However, it is questioned now whether existing price levels can be maintained without the incentive of a sustained overseas demand.

Sources of White Clover "Poland has been a leading source of white clover seed for American farms and now the supply is blockaded and prices are going up," says L. R. Neel, associate editor of Southern Agriculturist, in the November issue. "For years Louisiana has been producing a white clover peculiar to that southern region. In the beginning, white clover got to Louisiana and, becoming adjusted by natural selection, found a good home in the deep, moist soil of the Delta. When land was allowed to go to pasture, white clover came, and for some years fine seed crops have been harvested. This has been sold mainly to seed houses in the northern part of the country and its identity lost when it went into the trade. However, experiment stations were checking on Louisiana white clover and discovered that it was at least superior for southern conditions. Some seed houses learned of this southern seed and have been featuring it."

Garden Gadgets A new garden and lawn rake is one which has adjustable teeth. Each prong has tension supplied by a small compression spring attached to the base of the prong. When the rake is drawn over uneven ground, the prongs adjust themselves to the rough surface and contact the low spots as well as the high ones. Another new piece of garden equipment is a cart that looks like a giant dust pan. It is light in weight, has solid rubber tires and welded all-steel body sprayed with green lacquer over primer coat. The cart weighs only 15 pounds, but is heavy enough to haul trash, leaves, soil, fertilizer, etc. (Farm Journal and Farmer's Wife, November.)

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Section 1

November 6, 1939

TRADE BETWEEN THE AMERICAS Abolition of trade barriers as a means of insuring inter-American peace was urged yesterday by Assistant Secretary of State Henry F. Grady before the California State Society at Washington. Grady declared: "It is as important to get trade barriers between the Americas reduced as it is to keep the territorial boundaries clear of menacing and provocative military fortifications." The idea is prevalent, Grady declared, that the United States can recompense itself in Latin America for trade losses due to the war in Europe. This is impossible as long as pressure groups go so far as to protest concessions on imports only indirectly competitive with this country's goods, he said. (Washington Post.)

CANNED PEA MARKETING The Canned Pea Marketing Cooperative, which was a major factor in moving the tremendous 1938 pea crop, has raised the funds for its amended 1939-40 budget with \$7,000 to spare and is ready to push its plans for next year's crop, it was learned yesterday at Chicago. With the final reports on the 1939 pea crop indicating a reasonably close adjustment between stocks on hand and the potential market capacity, the officials foresee a needed increase in the acreage planted to peas in the spring. However, the research activities planned under the new budget will be directed toward gathering adequate statistics for canner scrutiny, so that the 1940 crop can be kept within bounds. (New York Times.)

MUM SHOW NOW OPEN More than 2,000 chrysanthemum plants in 50 varieties are on display in the U.S. Botanic Garden exhibit, which opened yesterday in Washington. The mums are shown to their best advantage through the use of variegated spotlights. The show will remain open for at least two weeks, officials said, with hours from 9 a.m. to 4 p.m. (Washington Times Herald.)

SURPLUS APPLE PURCHASING The Federal Surplus Commodities Corporation has reported that it bought more than 1,650,000 bushels of surplus apples since the government's buying program started on October 6. The apples are being distributed among families on relief, school children and welfare institutions. (A.I.).

Red Cross in Rural Areas The Maryland Farmer (October) in an item on the Red Cross Highway Emergency First Aid Stations, says: "Though established primarily to treat the victims of automobile accidents, these Red Cross first-aid stations are rapidly becoming important in the daily life of rural America. There are now 2,820 such stations, located in every state in the Union. In Arizona a station recently opened is 70 miles from the nearest doctor. These stations are operated by trained volunteers who hold themselves ready at all times to do what they can to assist the victims of accidents while waiting for the arrival of physician or ambulance...The Red Cross serves rural America in many other ways. Its public health nursing service carries on in many agricultural areas. Braille books for blind readers are made by many chapters. A nation-wide campaign to prevent accidents at home and on the farm is another feature of Red Cross service. All these activities are financed from the low annual membership dues..."

House Defeated the motion to instruct the conferees on the
Nov. 2 neutrality bill, H.J.Res. 306, by a vote of 243 to 181.
Defeated the Wolcott amendment to prohibit the Commodity
Credit Corporation and other Government agencies from dealing in bonds, securities and other obligations of belligerents, by a vote of 196 to 228. (Prepared by Office of Budget and Finance.)

Egg Ring Federal authorities and local police recently broke
Broken up a ring operating from Valley Stream, Long Island, which had been conducting an illicit business in the sale of rotten eggs. Climaxing a period of months of investigations, the officials raided the headquarters of the organization. There, it was charged, truckloads of incubator rejects--legally unfit for human consumption--had been broken out, placed in an agitator, packed in 30-pound cans and sold to various bakeries and manufacturers. It was said the raid came after federal food and drug agents had followed a truck bearing Indiana license plates through three states to Nassau County. (American Produce Review, November 11.)

Rubber on the Farm "Rubber on the farm is usually thought of solely in terms of tires, the most important use so far," says Neil M. Clark in an article in the Country Gentleman (November). But tires are not the only use. Rubber cow beds in place of concrete and straw have been used experimentally. Slabs of rubber composition have been perfected, together with a method of fastening them to the concrete and stalls. Reasons for rubber here are that in some sections straw is expensive and some boards of health consider straw unsanitary. Rubber grain-drill tubes have been found to have certain advantages over steel in Australia. Rubber sheep and cattle boots are being used to prevent the spread of foot rot. There is rubber tubing in the milking machine, rubber hose in spraying equipment, rubber drapers on combines and threshers,

rubber belts almost anywhere power is transmitted. Rubber sleeves fitted over the tines of potato diggers are said to result in a decrease in the amount of damaged potatoes. In one late track-type tractor, the track is a continuous band of thick rubber, with a core of steel cables. There are rubber fruit-tree bands; rubber kneeling pads and upholstery for the farmhouse; rubber rollers in bean threshers; internal combustion walnut crackers with soft-rubber belts. The steel spring seat found on many riding plows, mowing machines and other implements is being replaced by the seat made of sponge or 'air-foam' rubber. The list of modern farm uses of rubber is nearly endless and grows longer daily..."

Movies in Better Crops With Plant Food (October) comments editorially on the increasing extent to which motion pictures are being used in bettering agricultural practices. "The U.S. Department of Agriculture," it says, "for some time has employed films in agricultural extension work and is now putting out sound pictures. It is reported that colored movies will be used extensively when the Vegetable Growers Association of America holds its annual convention this winter. And now comes information that farmers themselves are purchasing equipment so that locally made motion pictures can be shown... In three counties in northwest Georgia the results on 80 demonstration farms were not being visited by enough people. When agricultural advisers asked the farmers comprising the program-planning committee what enterprise would promote interest, the answer was, 'Locally made motion pictures.' The first picture is a 30-minute film in natural colors showing how the demonstrators on these 80 farms have advanced their program for soil building and higher living standards... That the farmers are taking to these movies is indicated by the more than 3,000 people in 20 Georgia communities who are seeing the shows each month."

Profits from "Although it is not possible to place a definite value on much of the results of agricultural research there are certain phases of the work that lend themselves to such a determination," says R. I. Throckmorton, Kansas State College of Agriculture, in Country Gentleman (November). "This is particularly true in the case of new varieties of crops when it is possible to determine the acreage of such varieties on farms. The Kanota variety of oats was developed by the Kansas Station and first grown on Kansas farms in 1919... From 1919 to 1938 the increased production of the crop due to this variety was more than 173,000⁰⁰⁰ bushels. The value of this increase has been more than \$60,000,000 in Kansas alone... The Kawvale variety of wheat which has become popular in eastern Kansas and Missouri was developed by the Bureau of Plant Industry and the Kansas Station. Over the five years this variety has been grown on Kansas farms it has resulted in an increase of more than 15,000,000 bushels of wheat over the amount that would have been produced by varieties previously grown. This increase has a value of more than \$11,560,000... Similar information could be compiled in other states and along other lines of research."

Periodicals

The Country Home Magazine, which was originally Farm and Fireside, a journalistic institution among American rural folk for 62 years, will suspend publication with its forthcoming December issue. (Newsweek, November 6.)

Quest is a new periodical (issued only as sufficient material warrants publication) which contains condensed items on science, nature and medicine.

Packaging of

"Freezing Fruits and Vegetables in the Southwest" is the title of a paper by J. L. Heid, Bureau of Agricultural Chemistry and Engineering (Texas), in Refrigerating Engineering (November). Discussing packaging materials for frozen fruits and vegetables, he says: "Tin plate and glass containers, particularly when vacuum sealed, afford the greatest degree of protection against evaporation, oxidation and absorption of foreign odors. Sealed containers are indispensable for frozen orange juice to be stored for any length of time. Unfortunately, buyers have become used to sterilized food products in sealed containers and expect products to keep indefinitely until the seal is broken, regardless of the temperature. Pliofilm and lacquered cellophane afford the next greatest degree of protection against drying and absorption of odors from storage room atmosphere. Paper, waxed with paraffin, is more porous at low temperatures, and orange juice stored in waxed paper cups shows excessive evaporation and oxidation after five months storage in our laboratory."

Domestic
Starch

During September all domestic starch prices rose, except for sweetpotato starch. The 1,600,000-pound output of the Laurel, Miss., sweetpotato starch factory during 1938 had been entirely sold out by Labor Day. This year's run at Laurel started September 27 and will total well over 2,000,000 pounds by Christmas. A new starch factory at St. Francisville, La., first wholly private sweetpotato plant, is due to begin operations in time to take advantage of the 1939 crop. The combined output of the two plants can replace decreasing imports only to a fractional extent. Prospects for easy disposal of Maine's Aroostook County white potato starch, the midwest's corn starch, perhaps even wheat and rice starch, should be good. The chances are that Brazil will strengthen her recent drive to interest United States markets in cassava starch. (Farm Journal and Farmer's Wife, November.)

Texas Citrus
Cooperative

C. E. Bowles, of the Texas Extension Service, says in the Progressive Farmer (November) that the Rio Grande Valley Citrus Exchange has completed at Weslaco (Texas) the largest citrus dehydrating plant in the world. "The refuse emerges from the ovens a dry meal, one-sixth of its original bulk and ready to be sacked. Some is finely ground ready for mixing in poultry feeds; a coarser meal is prepared for adding to dairy cow rations and feeds for large animals. The Texas Experiment is running feeding tests to determine the value of citrus meal in the feedlot."

DAILY DIGEST

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Section 1

November 7, 1939

AID FOR DROUGHT AND FLOOD AREAS Four federal agencies last night prepared to spend as much as \$33,500,000 in an effort to provide relief to 115,000 farm families suffering from drought and flood conditions in 34 states. Acting on orders from President Roosevelt after he had conferred with Congressmen from the stricken states, the Farm Security Administration, Farm Credit Administration, Disaster Loan Corporation and Federal Surplus Commodities Corporation agreed on a plan to deal with the emergency immediately.

Announcement of the project was coupled with a statement by the Department of Agriculture that distress in some states was expected to increase considerably unless the drought is broken soon. The program envisages loans, direct aid and distribution of emergency food supplies.

The FSA has available \$8,500,000 for emergency rehabilitation loans and direct relief to farm families which cannot obtain adequate help from any other source. The FCA was expected to provide close to \$20,000,000 for emergency crop and feed loans to farmers who can give a first lien on their crops or livestock. The Disaster Loan Corporation has \$5,000,000 available for loans to eligible farm borrowers in those counties of Mississippi, Alabama, Florida and Tennessee which have been stricken by floods.

To augment the new program the Federal Surplus Commodities Corporation will increase shipments of surplus foodstuffs to drought and flood states. The shipments will be distributed through the public welfare departments and will supplement other forms of assistance.

Farm families needing the services of any of the four agencies may apply to the county offices of the FSA, to the FCA crop and feed loan offices or obtain information from county agricultural agents. (United Press.)

VENEZUELAN TRADE PACT The United States and Venezuela yesterday signed a reciprocal trade agreement, the eleventh of such pacts between this country and other American republics, the State Department announced. Going into force on December 16, the agreement includes concessions from Venezuela on such important American exports to that country as wheat, flour, oatmeal, prepared milks, hog lard, lumber, iron and steel products, automobiles, radios, refrigerators, engines, pharmaceutical products and paints. The State Department said these products represented about 36 percent of total United States exports to Venezuela last year, or about \$19,000,000 out of \$52,000,000. (Press.)

Demand, Price Outlook Total cash income of farmers in 1940 should be "materially higher" than this year's, but might still not reach the levels of 1937, the Department of Agriculture has reported. In a statement summarizing the various factors expected to affect 1940 farm income, the department said that its expectations of gains were based first on prospective increases in domestic business activity and consumer incomes and, secondly, on increased export demand for a few farm products if the European war continued for at least a year. The department noted, however, that some time in 1940 a period of readjustment in the general business picture might be expected to bring a considerable decline from the peak reached in the present upswing. Present production was running ahead of actual consumption and exports by a considerable margin, and uncertainties arising out of the war and adjustments necessary after a period of inventory accumulation would probably bring fluctuations in industrial activity, it was said.

"The probable supply and demand conditions for farm products in general in 1940 indicate that a slightly larger total volume of marketings will be disposed of at higher prices," the survey concluded. "Practically all groups of commodities will share the increase. As a result, cash income from the sale of farm products should be materially higher in 1940 than in 1939, but may not reach the 1937 level. Income from livestock and livestock products may be nearly as large as in 1937. Although the increase in income from crops may be relatively as large as for livestock, the larger domestic and world supplies of some important crops may keep the income from them from reaching 1937 levels. Government payments will be larger in 1940 than in 1937 and will partially offset the lower income from crops, but total farm income, including government payments, is not likely to equal that for 1937, when income was the highest for any year since 1929. The improvement in farm income in 1940 may be more pronounced for meat animals, dairy products, poultry and fruits and vegetables than for cotton and wheat. Some commodities may also benefit from increased foreign demand, particularly hog and dairy products." (New York Times.)

Livestock Insurance Many borrowers of the Farm Security Administration this year are protecting themselves against death of their livestock by insurance through nonprofit cooperative associations. The plan is of special benefit to small farmers. Members pay $4\frac{1}{2}$ percent of the appraised value of the animal as premium each year. If the animal dies or is killed, the farmer will be paid 80 percent of its appraised value by the association. At the close of the year, after losses and operation expenses are deducted, the balance is returned to the members of the association.

Future of the Farmer Secretary Wallace contributes "The Future of the American Farmer" to the November 8 issue of the New Republic, which is devoted to a special symposium on "The Promise of American Life." Among other subjects, the Secretary mentions county planning, saying: "In the Department of Agriculture we have begun a bold experiment in democracy. We are trying to put into practice the idea that in a democracy the economic decisions ought to be made by the people. We are slowly building a mechanism, county by county, in collaboration with the land-grant colleges and the Extension Service, by means of which farmers themselves will determine the elements of their total agricultural program, will decide how these elements may be welded together in one effective program, and, finally, will administer that program. We call this county planning. Actually, the farmers in any given county immediately see that they must interest themselves in forces and problems which go far beyond the county line. I am optimistic enough to believe that the farmer members of these county-planning committees will wrestle with the complex problems of agriculture as ably as do the most intelligent leaders of industrial and labor groups. Our job in the Department and in the colleges is to put the facts before them and to abide by their decisions."

George Soule, under the title, "Toward a Planned Society," in the same symposium, says in one paragraph: "The post-war era also saw the incubation of new social problems demanding attention to national economic policy. The farmers' surpluses gave rise to a long series of ingenious schemes pressed by the farm bloc. Finally, in Mr. Hoover's administration, this agitation broke through the stiffest sort of conservative opposition into the establishment of the Federal Farm Board and a new series of credit agencies. Once the ice was broken, the development of agricultural planning and control could not be stopped. Under the pressure of depression, it grew into the AAA, with its varied and changing devices. In spite of all the ridicule and opposition that it aroused, the Agricultural Adjustment Administration can never be demobilized; and the Department of Agriculture is today one of the most complete planning agencies existing in any government in the world. The fact that it has not solved its problem does not mean that we shall ever go back to the old helter-skelter order in agriculture."

Poultry Research Under an associate professorship in the Department of Poultry Husbandry at Iowa State College, the research committee of the Institute of American Poultry Industries has set up the first Department of Poultry Products Research at an educational institution. Supported by poultry industry funds for the present, Dr. George F. Stewart has begun the study of fattening, killing and dressing problems, industrial uses for egg whites and possible industrial uses for such waste products as shells, feathers and offal. (Food Industries, November.)

Statistical Course For Field Workers The Department Graduate School, in response to various inquiries, is considering the possibility of offering its field workers a correspondence course in elementary statistical methods in biology and plant and animal industries. The course considered would lead up to the treatments given in textbooks, making possible their more intelligent use. A well-known textbook would be used as a guide. This is not designed as a college credit course, but a certificate would be awarded for satisfactory completion. The tentative plan contemplates 15 to 18 assignments, requiring on the average 5 or 6 hours each. Study of assignments would be followed by answering questions and working practical problems, which would constitute the student's report. Opportunity for discussion of the student's own problems would be given. The total expense would probably not be over \$25, which would include the price of the textbook, fees, and postage on assignments. Those interested should inquire of Dr. A. F. Woods, Graduate School, Department of Agriculture, Washington.

Bulletins on Cooperatives The ever-changing pattern of growth and development in farmers' cooperative business enterprises is traced in a new series of bulletins now in preparation by the information and extension division of the Farm Credit Administration. Written in a popular rather than a technical style and enlivened by dozens of action pictures of cooperative operations, the publications describe something of the history and present status of the agricultural marketing and purchasing associations in each of a number of States. Seven of the group already have appeared -- for Virginia, Ohio, Kentucky, Michigan, Nebraska, Kansas, and Colorado. More will be off the presses during the coming months. Copies of the bulletins will be mailed without charge, as long as supplies are available. Requests for specific State bulletins should not be made, however, until announcement of their publication is made. (News for Farmer Cooperatives, October.

Pellagra Remedies "Two new chemical remedies for pellagra, have been discovered by a three-man research team, Drs. Charles E. Bills and Francis G. McDonald of Evansville, Ind., and Dr. Tom D. Spies of the University of Cincinnati and Hillman Hospital, Birmingham," reports Jane Stafford of Science Service. "Nicotinic acid, however, continues to be a weapon with which doctors will treat pellagra. The two that have just been discovered are pyrazine -2, 3-dicarboxylic acid and pyrazine monocarboxylic acid. They are different chemically from nicotinic acid, but they cured 23 pellagra patients, Drs. Bills, McDonald and Spies reported to the Southern Medical Association. Whether these two chemicals are as good as or better than nicotinic acid as a pellagra remedy is now under investigation..."

DAILY DIGEST

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Vol. LXXV, No. 28

Section 1

November 8, 1939

DROUGHT AREA, With practically no rain during the past week, the
SMALL GRAINS severe, extensive midwestern drought remains unrelieved, reports the Weather Bureau. In large areas there has been no materially helpful rainfall since around August 20, making unprecedented fall shortages of moisture in many localities. Precipitation during the week, much of it in the form of snow in the high elevations and more northern sections, brought a fairly good supply of moisture rather generally to the Northeastern and Middle Atlantic States, while conditions are rather favorable in the Ohio Valley. Recent falls have been helpful in the extreme lower Mississippi Valley, while conditions are still favorable in much of the Great Basin of the West. There is general need of moisture, most urgent in the southern Great Plains.

Little or no improvement is noted in the principal small grain producing sections of the country. In the Western Belt the situation continues critical, especially in Nebraska, Kansas and northwestern Oklahoma. For Nebraska the state average rainfall for September and October was only a little more than an inch, the driest on record for these months. In Oklahoma the total for the two months was approximately the same as the previous minimum. In Kansas the two-month period had less than an inch of rain, the least on record. The previous driest, 1888, had more than twice as much as September and October this year.

In Kansas most wheat stands are spotted and plants are showing little vitality; very few fields have sufficient growth for pasture. In Oklahoma improvement is reported in many eastern and southern localities where stands are fair, but in the main producing area much is still ungerminated and there are many reports of early plants wilting or dying. In Nebraska the outlook is mostly poor.

1939 COTTON A new cotton crop loan program for 1939, which estab-
CROP LOANS lished for the first time a policy of location differentials, was announced yesterday by the Department of Agriculture. The Commodity Credit Corporation will make loans at the same basic rate as on the 1938 crop, 8.3 cents a pound on 7/8-inch middling cotton, but with new allowances for distances and tares which actually will make the loans range from 8.7 to 9.3 cents apound. The highest loans will go to producers near cotton ports and concentration points, the lowest to the most remote producers. The lowest rate will apply to parts of western Texas and New Mexico, while the highest will go to places in North Carolina and Virginia. (New York Times.)

Seedless Fruit Sprays The technique of producing fruit from unpollinated flowers -- parthenocarpy -- advanced another step when scientists of the Department found that two new growth substances, naphthalene acetic acid and naphthalene acetamide, are much more effective as pollen substitutes than substances used in previous tests. The experiments, conducted by the Bureau of Plant Industry, renew interest in parthenocarpic fruits, which develop normally but produce no embryos, or seed. Most of the previous work, and all with the two new substances, has been with the holly plant. In the tests, conducted by Dr. F. E. Gardner and P. C. Marth, the female plants were sprayed with weak solutions of the substances and covered with glassine bags to protect against pollination. Both greenhouse and outside holly plants were sprayed. Using an 0.01 percent solution, the strongest of three solutions used, 85 to 98 percent of the flowers sprayed set fruit. The naphthalene acetamide was slightly more effective than the naphthalene acetic acid. The Department will continue experiments with other fruits and substances. Production of parthenocarpic fruits -- free from seeds-- would be commercially desirable in some fruits such as tomatoes which do not have a hard seed covering about the embryo. At present the chemicals are expensive, yet because of the low concentrations needed, the cost is not prohibitive.

Shipping Container A new type of refrigerator carton to facilitate safe as well as speedy handling of serums, vaccines and other perishable biological products has recently been developed. The new carton, which allows the products to be packed in dry ice, has been used in shipping animal vaccines. In this carton, biologicals can be shipped by express or air to any part of the United States at a constant temperature of 32 to 42 degrees. (Modern Packaging, November.)

Cake, Meal R. R. Rates New railroad rates on cottonseed cake and meal, which went into effect October 16, mean savings of close to 50 percent on hauls of less than 100 miles, and nearly 30 percent on distances slightly greater, the scale of saving sliding downward as the distance increases. Rates on cotton hulls formerly were considerably lower than for cake and meal, and the reductions for transporting hulls were not as drastic. (Southwestern Sheep & Goat Raiser, November.)

Articles on BDI, BHE The October issue of The Chemist, which is running a series of articles dealing with opportunities for chemists in the government service, by Louis Marshall, describes work in the Bureaus of Dairy Industry and Home Economics.

Forest Industries Conference Southern Lumberman (November 1) comments editorially on the recently organized forest industries conference, which is described in this issue in an article by Secretary Wallace. The article, says the editorial, "should be read with interest by all lumbermen. It is particularly encouraging to observe the vision and broad-minded point of view of the Secretary in recognizing the practical aspects of the matter. The large problem involved in forestry, he says, involves private forest land and the difficulties inherent in its ownership and operation. 'Unless they are profitable,' Secretary Wallace sensibly points out, 'good forest practices are interesting to discuss, but hard to secure. To make them profitable requires first of all an understanding of the factors affecting them, such as markets, credits, taxes, utilization and the like. Determination of these factors is not a one-man or a one-agency job. It is rather a challenge to the collective brains of all organizations and agencies concerned with forest lands and industries. I believe the Forest Industries Conference represents a most promising approach to the clarification of forest industry problems and that it can aid materially in their solution.'" Secretary Wallace is the head of the governmental department embracing the Forest Service and controlling the National Forests. It is gratifying to observe his helpful and co-operative attitude. Approaching its objectives with that attitude on the part of all those composing it, the Forest Industries Conference cannot fail to be of value."

Agricultural Adjustment An editorial in the Montana Farmer (November 1) says: "Henry A. Wallace, Secretary of Agriculture, stated the objective of the federal farm program some time ago when he said 'there is a point of balance...where the welfare of both the farmer and the consumer is best served. And it is that point of balance that we are working toward. That is what the agricultural adjustment program is all about.' If the trials and hardships of the past decade have done nothing else they have taught the worker in the city that he cannot long prosper at the expense of the worker in the country, and they have taught the worker in the country that he cannot enjoy a satisfactory income unless the city man has money with which to purchase his products...The agricultural adjustment program is making encouraging progress in stabilizing rural purchasing power. To the extent to which farmers make this program function they help not only themselves but the folks in the city. The thing that is most needed to make the wheels go around in America is parity income -- an equitable relationship between farm incomes and city incomes."

'Hopper War General headquarters of the grasshopper control work will be established at Denver, Colorado, it is announced by Dr. Lee A. Strong, Chief of the Bureau of Entomology and Plant Quarantine. The office will be established as soon as the details of the 1939 operations and completion of the fall egg survey will permit.

National Consumption Of the estimated \$59,300,000,000 of national income in the fiscal year 1935-36, 10 percent went into savings. President Roosevelt was told recently in a report by the National Resources Planning Board based on information on family income obtained from about 300,000 families. Virtually all of the savings were by the top third of the nation's income recipients. The study was held by the board to be "a more accurate and comprehensive picture of national consumption than was ever before possible."

The nation's 29,400,300 families of two or more persons and its 10,058,000 persons living alone as lodgers or servants, the board estimated, spent \$50,200,000,000, or about 85 percent of the total income, for current consumption; \$2,200,000,000 or nearly 4 percent for gifts to relatives and friends, churches and philanthropic agencies. About \$900,000,000 or 1.5 percent was paid out as income, poll and certain minor personal property taxes. Other taxes, placed at \$9,600,000,000, were included in the general consumption outlays.

Of the \$50,200,000,000 used for current living expenses, food outlays accounted for about \$17,000,000,000 or 29 percent. Housing took \$5,500,000,000.....with household operation and furnishing costing \$6,900,000,000, to bring the housing grand total up to \$16,000,000,000. Clothing ranked fourth in current consumption outlays, the figure being \$5,300,000,000. Automobile expenditures were fifth, with a total of \$3,800,000,000 for operating costs and cars purchased during the year. This figure contrasted with a total outlay of only \$884,000,000 for all other means of transportation combined.

The total spent for medical care was \$2,200,000,000 or slightly less than 4 percent. An additional \$650,000,000 of free care was provided by public and private agencies. Recreation took a \$1,600,000,000 outlay. The outlay for personal care was about \$1,000,000,000, as was that for tobacco. Reading matter took something more than \$500,000,000. Except for a few miscellaneous items totaling about \$300,000,000, education was at the bottom of the list with an outlay of about \$500,000,000, but this was only a sixth of the total national educational bill, the balance being met from taxation.

In an analysis of how the national outlays were divided among different income groups the report divided the consumer units into three groups equal in size. The lowest third had incomes of less than \$780 in the year studied, the middle third incomes of \$780 to \$1,450 and the top third incomes from \$1,450 to more than \$1,000,000

The report was prepared under the direction of Dr. Hildegard Kneeland. (New York Times.)

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Section 1

November 9, 1939

U.S. COTTON, A United States cotton crop of 11,845,000 bales, the **WORLD SUPPLY** smallest since 1935, was forecast yesterday by the Federal Crop Reporting Board. The forecast, based on conditions on November 1, was 83,000 bales lower than the board's estimate a month ago, and compared with a 1938 crop of 11,943,000 bales and a 10-year (1928-37) average of 13,800,000. The crop report said the indicated yield an acre for the country was 234.1 pounds, the third highest on record and about 10 percent above the average of the five most recent years. The average last year was 235.8 pounds, the second highest on record.

Acreage remaining for harvest was put at 24,222,000 acres, abandonment having been 2.9 percent of the 24,943,000 acres in cultivation on July 1. Acreage harvested last year was 24,248,000 and abandonment was 1.1 percent of the 25,018,000 acres in cultivation on July 1, 1938. (A.P.)

The world supply of all growths of cotton in the 1940-41 season is expected to be slightly below the record or near-record supplies of the past three years, the Bureau of Agricultural Economics says in its annual outlook report. World consumption in 1939-40 is expected to be about equal to production. This would indicate a carryover of all growths of cotton on August 1, 1940, not materially different from the near-record stocks of 21,900,000 bales at the beginning of the current season.

"With the same harvested acreage as in 1939, and with yields equal to the 5-year 1934-38 average, the 1940 production of American cotton would be considerably less than in 1939," the bureau said. The 1940-41 foreign crop is expected to show at least some decline. The world carryover of American cotton August 1, 1939, was about 14,100,000 bales, a new high. Even with a below-average crop, the indicated 1939-40 world supply of American cotton of 25,800,000 bales is only slightly below the peak supply of 1932-33. It is a little larger than the 1938-39 supply and 3,900,000 bales above the 10-year average.

FCA TO AID

DROUGHT AREA

Governor F. F. Hill of the Farm Credit Administration announced yesterday that emergency crop and feed loans for 1940 have been made immediately available in those sections of the country where farming conditions are seriously affected by drought or flood occurring this year. Emergency crop and feed loans in the affected areas are being made approximately two months in advance of the usual launching of the program, which customarily begins shortly after the first of the year. Applications for loans will be received by field representatives of the emergency crop and feed loan section in the various counties included in the loan program.

Classification of Farm Workers "The economic classification of Americans who work on farms is bewildering," says an editorial in the *Commonweal* (November). "The October Agricultural Situation, published by the Bureau of Agricultural Economics, throws light on half a dozen of the farmer grades. The Farm Security Administration reports on the operation of the Bankhead-Jones Act: 'Altogether, about 13,250 farmer tenant families should be living on farms of their own by June, 1940, as a result of the Bankhead-Jones program.' But when the act was passed in 1937, tenants were increasing at the rate of about 40,000 a year. In another article, day wages for cotton laborers (1935: without board) are given to be: in the Texas Plains, \$1.25; the Delta, \$1.00; the Piedmont, \$.55. In North Dakota at harvest time last year, 1,485 individuals interviewed had 3,367 farm jobs in the preceding 18 months. Year in and year out their earnings, of course, were miserable. The aristocrats of farm labor, 'regular hired men,' commonly received \$30 with board in summer in the region, and \$15 in winter. American attack on the farm problem has clearly been too exclusively from the angle of the farm operator. The hardest human problems arise far below that grade. It would seem wiser to approach from the extremes: try to make owning a farm a secure and 'prosperous' advantage, prosperity being conceived in more terms than simply money income. But first work with all earnestness to create humane conditions and incomes for the mass at the bottom of the pile."

Soybean Record All records for transactions in future contracts for soybeans on the Chicago Board of Trade have been shattered the past month, the total being 12,889,000 bus. compared with 7,316,000 bus. the same month in 1938. On one day alone the volume of business was 1,059,000 bus., establishing a record for daily transactions. The market now is being used successfully by exporters, cash handlers and processors. In addition to the trade interests using the market, a wide general participation by commission house traders has developed. Probably the most satisfactory phase of the situation from the standpoint of producers is that the record-smashing crop and the huge movement prices have advanced to and held high levels. In other years during the early marketing period prices have declined under the hedge load. (Modern Miller, November.)

State Food, Drug Laws Eleven states have now passed new food, drug and cosmetic acts since the enactment of the federal law, according to a survey by the Toilet Goods Association. The states are Arkansas, California, Connecticut, Florida, Indiana, Nevada, New York, North Carolina, North Dakota, West Virginia, and Wyoming. The organization noted that while these laws do not conform in every instance to the federal act, they do conform sufficiently with respect to cosmetics so that intrastate shipments after January 1 should be labeled in accordance with the federal act and its regulations. In addition to the states mentioned, Maine and Louisiana have cosmetic regulatory acts. (Press.)

Production

The per-unit cost of commodities and services used in production of farm products in 1940 probably will average a little higher than in 1939, the Bureau of Agricultural Economics says in its annual outlook report. "Some rise in wage rates is expected and prices of most commodities used in farm production probably will average a little higher," it states. "Most increases are likely to be small, but war requirements may cause sharply higher prices for a few commodities." The bureau looks for a further decline in total farm employment next year, but added that "greater use of mechanized equipment will enable farmers to maintain production at current levels".

Farmers probably will use 5 to 10 percent more short-term credit in 1940 than in 1939, exclusive of Commodity Credit Corporation loans, the bureau says. The volume of farm-mortgage financing also is expected to be higher. Ample short-term credit will be available to meet all anticipated credit demands by farmers of good credit standing. Interest rates are expected to be little, if any, higher than in 1939. The present rate of increase in use of short-term credit may be augmented during 1940 because of rising costs of farm supplies and equipment, higher livestock prices, and prospects for better farm income next year.

A further decrease in the number of horses on farms is indicated by the bureau. Increase in tractor competition, declining prices for horses, inroads of disease in some sections, and a decreased colt crop in 1938 were the basis for the forecast. The length of time this trend will continue depends largely upon the trend in colt production during the next few years. This trend will be determined by a number of factors, such as the price of work animals relative to prices of other livestock and to tractor prices and prices of feed grains and hay.

Wheat (Tenn.)

Community

"Wheat Community in Roane County, Tennessee, composed of 734 farm people, offers a clear-cut picture of rural people working together to solve their economic problems," says J. H. McLeod, Tennessee Extension Service, in the Land Policy Review (September-October). "Because the Wheat organization has been functioning steadily for nearly 3 years, with carefully kept records, it affords valuable perspectives upon the accomplishments that are possible when a group of farmers work together to improve their community. Nor is Wheat Community by any means the only section of Tennessee, or the country, where similar progress has been made. Flowing from this work in 2 years, these accomplishments may be listed: The establishment of a cooperative telephone service where previously there had been no telephones at all; organization of a cooperative for grading and selling eggs; application of phosphate to 1,050 acres of pasture and hay crops; application of 2,000 tons of lime to 1,400 acres; reforestation of 30 acres of land; completion of 10 new painted homes and 10 brooder houses; erection of a modern up-to-date clubroom as a meeting place for the community; a decrease of 37 percent in soil-depleting crops; 3 new flocks of sheep, 10 new flocks of turkeys, and 5 purebred bulls brought into the community..."

Solar Energy Massachusetts Institute of Technology engineers said recently they planned to trap some of the sun's heat and "hoard" it away for possible use in the winter house heating, summer air conditioning and power generation. Professor Hoyt C. Hottel, a leader of the institute's solar energy program, declared a new laboratory house had been completed with equipment designed to catch the heat as it falls on the roof. Although they declared New England's share of solar heat would make domestic heating by solar radiation uneconomical there, the engineers said there is sufficient sunshine to test the efficiency of systems for localities having less rigorous climates. Explaining there is a possibility of using the sun's energy in the production of power -- during the summer an acre of land receives from the sun heat equivalent to burning 250 tons of coal -- Professor Hottel said the power aspect would receive special study in Tech's research. (Associated Press.)

Sulphur Dioxide Concentrations of poisonous sulphur dioxide in city atmospheres, where it is most prevalent, have no direct effect on human health, the American Chemical Society was told recently, according to a United Press report from Boston. Carl Setterstrom of the Boyce Thompson Institute for Plant Research, said the Meuse Valley (Belgium) disaster of 1930 focused attention on the possible importance of sulphur dioxide as an atmospheric contaminant affecting humans. "More than 2,000 tons of sulphur dioxide, a gas formed by burning coal, are released into the air of New York City in a single winter's day," Mr. Setterstrom said. "This gas, greatly diluted, is breathed by humans and animals and absorbed by plants within many miles of the metropolitan area." However, animal experiments conducted at the institute showed that such concentrations of the gas have no direct effect on human health. Other research at the institute disclosed that concentrations as low as .0001 percent were sufficient to damage the foliage of sensitive plants growing under susceptible conditions. But very low concentrations such as prevail over most agricultural areas exposed to sulphur dioxide fumes were found to be without harmful effect.

Hybrid Corn Regulation The last Kansas Legislature passed an act regulating the sale of hybrid seed corn. This act defines hybrid corn and provides for registration of each specific hybrid combination with the Secretary of the State Board of Agriculture. After January 1, it will be illegal to sell as hybrid any seed corn selected from a field of hybrid corn. (Modern Miller, November 4.)

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Section 1

November 10, 1939

WAR BOOM

CHECKED, SAY REPORTS

"Cooperation between industrial leaders and federal officials has stopped the first phase of a threatened war boom, according to a series of reports prepared by government economists," says Charles W. Hurd in the New York Times. "They are acting in conjunction with business men. The reports are designed to offer guidance in developing plans to help business to adjust itself to the psychology of war business and to the reaction which would follow ending of hostilities.

"These reports represent a beginning, rather than a conclusion, of inquiries by economists in the Department of Commerce and the Department of Agriculture, which are expected to evolve a business yardstick which was lacking in the World War. Much of the study centers about inventories, on which there are no complete statistics dating from 1914-18, although such figures are considered an important factor in considering price levels and their relation to consumer demand.

"The material already gathered indicates that heightened industrial activity, larger inventories and increased employment in the last two months have generally exceeded a level justified by normal consumer demand..."

RISE IN FARM INCOME SHOWN

American farmers received cash income of \$847,000,000 in September, bringing their total for the first nine months of this year to \$5,441,000,000. These estimates, made public yesterday by the Bureau of Agricultural Economics, compared with an income of \$745,000,000 in September last year, and \$5,357,000,000 for the corresponding 9-month period. Included in the September 1939 income was \$66,000,000 in government payments. (A.P.).

FARMERS' COOPERATIVES

With a substantial increase in volume of products handled, farmers' marketing and purchasing cooperatives chalked up a two billion dollar business during the 1938-39 marketing season, it was reported today by Tom G. Stitts, chief of the Cooperative Research and Service Division of the Farm Credit Administration. "Although the dollar total was somewhat under that of a year ago, the difference is more than accounted for by a decline in farm products price levels of approximately 21 percent and a drop in farm supply prices of about 8 percent," Stitts said.

Of the 10,700 active co-ops, 8,100 were engaged primarily in marketing, and 2,600 in the purchasing of farm supplies. The marketing groups handled \$1,765,000,000 and the purchasing groups \$335,000,000 of the \$2,100,000,000 total. The previous year's total was \$2,400,000,000.

Section 2

Winter Wheat
Outlook

The wheat acreage seeded for harvest in 1940 will be about the same as for 1939, the Bureau of Agricultural Economics reports in its annual wheat outlook. Conditions for seeding and starting wheat have been unfavorable over practically the entire winter-wheat area. Even though higher wheat prices followed the declaration of war in Europe, farmers generally did not plan extensive increases in seedings in the important winter wheat States.

Production will total about 760 million bushels, if the total wheat seedings for harvest in 1940 are unchanged from the 64.6 million acres seeded last year, and average yields are obtained. This would be 75 million bushels more than the average domestic disappearance of 685 million bushels during the last 10 years. Should exports approximate the 10-year average of 70 million bushels, the carry-over on July 1, 1941 would be about the same as on July 1, 1940.

Unless unusually favorable growing conditions in the winter wheat States exist for the remainder of the growing season, however, and conditions for spring wheat are also favorable, yields per seeded acre for all wheat will be below average. This would result in a reduction at the close of the season of the moderately large carry-over in the United States. The carry-over, however, would still be large enough to assure ample supplies by classes for the marketing year beginning July 1, 1940.

No marked reduction in wheat acreage in Europe is expected for the 1940 crop, the Bureau stated. Probable decreases in acreage seeded in the areas of military operations are likely to be at least partly offset by increases in neutral countries and in the United Kingdom. World acreage, therefore, in 1940 is likely to be about the same as for 1939. Average yields on this acreage would result in a crop almost equal to prospective world consumption. Such a crop, of course, would not substantially reduce the large world carry-over stocks.

Awards for
Plastics

Everything from a new kind of coat hanger to the table tops for the Library of Congress have won awards in this year's Modern Plastics competition announced recently. The widespread use of laminated plastics in the new Annex of the Library of Congress received a major award. Table tops, corridor wall panels, book shelves, drawer fronts in the card index room, were only a few uses of plastic products in this new architectural creation. Luggage, whose outer surface is a laminated wood veneer imbedded in transparent plastic and which looks as though the modern traveller was carrying around part of a beautiful inlaid table top, won another award in the nation-wide competition. (Science Service.)

Feed, Stock Outlooks

The rapid increase in livestock, together with improved demand for livestock products, is steadily improving the outlook for feed grains, the Bureau of Agricultural Economics has indicated. Livestock numbers will show an increase of about 7 percent during 1939, and some further increases are expected in 1940. Livestock numbers are now about in balance with grain production, and some progress may be made in 1940 toward reducing the very heavy stocks of feed grains from the crops of 1937 and 1938. The sealing of a large volume of corn under Government loan is also helping to improve the price situation for feed grains.

Livestock slaughter, and meat and lard production, in 1940 will be larger than in 1939, the Bureau says. An increase of 8 or 9 percent in the total dressed weight of livestock slaughtered under Federal inspection seems probable. Per capita production of federally inspected meats and lard in 1940 will be larger than in any recent year and may be about equal to the 1929-33 average. Consumer demand for meats in the United States in 1940 is expected to be stronger than in 1939.

Consumer demand for hog products in the United States in 1940 will be stronger than in 1939, the bureau says. Larger foreign demand for pork and lard in 1940 also is in prospect as a result of the war. Effects on hog prices of the improvement in domestic and foreign demand, however, probably will be offset largely by the increase in the supplies of hogs for slaughter during 1940. The number of hogs slaughtered under Federal inspection in the present hog-marketing year -- 1939-40 -- probably will be about 20 percent greater than in 1938-39. A further increase in the number of pigs raised is expected in 1940.

Total slaughter of cattle and calves in 1940 is expected to be somewhat smaller than in 1939, says the bureau. Steer slaughter probably will show little change, but marketings of breeding stock in the Western States are expected to be reduced if feed crop and range conditions are near average next year. Cattle numbers are expected to be about 2 million head larger next January 1 than last. The number of cattle fed in the Corn Belt this winter is expected to be larger than in 1938-39. Cattle feeding in the Western States probably will be on a smaller scale than last season. Marketings of fed cattle during the late winter and early spring in 1940 are likely to be larger than the relatively small marketings of that period in 1939. Cattle prices may average slightly higher in 1940 than in 1939.

Exports Show Rising Trend

Exports by the United States in September showed a definite tendency toward higher volumes compared with the corresponding period in 1938, according to a new analysis issued recently by the Department of Commerce. This report, which noted a gradual rise for several months ending in September, was a further study of trade, already reported by commodities, which dealt principally with export and import trade by countries for the first three quarters of 1938. (New York Times.)

Poultry Flour & Feed (November) prints a paper by Harry
Nutrition W. Titus, Bureau of Animal Industry, on the effect of
 poultry diet on embryonic mortality and hatchability.
Summarizing studies at Beltsville, he says: "Hatchability appears
to be influenced by the source of the protein in the diet. For good
hatchability the diet should contain about 16 percent of protein if
good quality. The essentiality of vitamin B. for hatchability is
doubtful. About 120 International units of vitamin D (of the kind in
cod-liver oil) per 100 g of feed are required for the high production
of hatchable eggs. Too much vitamin D from irradiated ergosterol or
cod-liver oil decreases hatchability. Too much calcium in the diet
decreases hatchability, but the effect is conditioned in part by the
phosphorus content. Satisfactory levels of calcium and phosphorus
intake are given. Sunshine supplies something besides vitamin D that
is necessary for good hatchability. Adaptation to diet and the age
or stage of development of chickens may affect the hatchability of
their eggs. Third-week embryonic mortality is due to cumulative ef-
fects, but first-and second-week mortality appear to be due to defin-
ite causes..."

Trends in The world is getting warmer. There appears to be
Temperature a trend to higher temperature, J. B. Kincer of the
 Weather Bureau, recently told the Symposium on Tempera-
ture sponsored by the American Institute of Physics. "That there have
been major changes in geologic climate has long been known," said Mr.
Kincer, "but climatologists have considered historic climate as a
rather stable thing, with short period variations of considerable mag-
nitude, but without especially significant secular trends covering
long periods of time. "However, since the turn of the century there
has been such a persistent trend to higher temperatures, world-wide in
scope, as to suggest that the orthodox conception of the stability of
climate needs some revision at least." Mr. Kincer cited as examples
the records at Portland, Oregon, where 17 of the past 20 years have
been warmer than normal. And at Washington, D. C., 17 years in the
last 20 have been warmer than normal and every year since 1926 above
normal. (Science Service.)

Scientific Determined to keep the streams of knowledge
Journals flowing between America and the nations at war,
 American scientists and scholars are checking careful-
ly to be sure that the interchange of journals of research interest
continues. Whenever an important journal is not received, the Amer-
ican Documentation Institute in Washington is to be notified. This
agency, created by scientific and scholarly organizations to aid in
handling joint problems concerning the literature of intellectual
activities, will follow the matter with the State Department's aid, sur-
mounting so far as possible such obstacles as interrupted transporta-
tion, embargoes and censorship. (Science News Letter, November 11.)

DAILY DIGEST

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Vol. LXXV, No. 31

Section 1

November 13, 1939

WALLACE TALKS

TO NEGRO

FARMERS

Secretary of Agriculture Wallace coupled denunciation of totalitarian government and a plea for better understanding among the races in an Armistice Day address to more than 5,000 southeastern Negro farmers and educators at Tuskegee Saturday, says an Associated Press report.

"Followers of alien 'isms' in this country," he said, "have had a rude shock. They have found that all totalitarian government leads to one and the same thing--the suppression of free speech, private property and individual liberty." "The American people," he continued, "want no dictators or dictatorships. They have democracy in their blood. They want a chance to 'cuss' the government from top to bottom."

Mr. Wallace said: "Permanent democracy requires soil building and security of farm tenure." He predicted war's effects "will make it harder to preserve democracy." He said his experiences "in the field of genetics" and "with social problems" had led him to the conclusion that "almost all, if not all, the propaganda about superior racial stocks has no basis in scientific fact."

B.A.C.E.

EXHIBIT

An exhibit of wide variety, action and color, showing the results of work of the Bureau of Agricultural Chemistry and Engineering, is open this morning on the first floor of the Administration Building. The exhibit will remain for several weeks. The high light of the show is a brilliant display of agricultural specimens preserved in transparent plastic. There are other exhibits ranging from varicolored gumdrops, in which sweetpotato starch was used, to fertilizer in pellet form. There is a fireproofed Christmas tree standing in the chemical solution used for the purpose. In the information room at the north entrance there is an exhibit of photographs showing bureau work.

F.S.C.C COTTON

PURCHASING

The Agriculture Department has authorized the Federal Surplus Commodities Corporation to buy about 75,000 bales of surplus cotton for distribution to state relief agencies which will use it in making mattresses and comforters for relief families. The corporation also will buy cotton ticking and cotton comforter covering material to be distributed to the relief agencies for making the mattresses and comforters. (A.P.).

Research in A research project, designed to discover ways of
Nutrition increasing the nutritional value of foodstuffs pro-
 duced on American farms through studies of soil and
crop management, soil types, and plant and animal nutrition, has been
undertaken by the Department in cooperation with several research
agencies. The investigations will center at Cornell University, but
they will extend throughout the United States. Nominally under the
Bureau of Plant Industry, the new research will have the cooperation
of other bureaus, and eventually of many State experiment stations
and other research agencies.

Secretary Wallace issued the following statement: "Work at the
new laboratory is expected to develop facts that will enable practices
in soil management and crop production to be dovetailed more closely
with human nutritional needs. Agricultural scientists have done a
good job in solving problems of quantity production and market quality.
Today, new advances in the science of nutrition make it necessary to
think about doing an equally good job on quality production as it re-
lates to nutritional value. One of the early steps will be a survey of
mineral resources in the soils of the United States -- not the minerals
that are used as precious metals or industrial materials, but the vital
elements that human beings must get from foods, which in turn get them
from the soil...

"More is being learned every day about deficiencies of certain
rare or trace elements in soils. It is now known that plants need some
of these elements in very minute amounts just as human beings need iron
and vitamins in relatively minute amounts. Sometimes a little too much
will actually kill the plant. But if it does not get what it needs it
will suffer from some nutritional disease as real and serious as rickets,
pellagra, or anemia in humans. We know very little about these varia-
tions in soils, and especially about what they mean in terms of human
nutrition...One of the great difficulties in working with such problems
in the past has been the lack of methods refined enough to detect the
minute quantities of some vital minerals in soils and in plant and
animal tissues -- minute quantities that mean the difference between
sickness and health, or even life and death. New developments with the
spectrograph and the polarigraph are rapidly removing this difficulty.
The discovery of several of the vitamins in their 'pure' chemical form
also helps us to get more accurate figures on the vitamin content of
different foods and the vitamin needs of humans and animals. The time
is ripe for beginning a system of study that will start with the soil and
go right through to man. Hitherto agriculture has been almost entirely
concerned with the technical problems of quantity production, fighting
diseases and insects, and certain quality factors that have to do with
processing, shipping, and appearance on the market..."

Dr. L. A. Maynard, at present Head of the Laboratory of Animal
Nutrition of Cornell, has been appointed Director of the Laboratory.

Dairy Outlook

Some increase in consumption of fluid milk and cream is expected this winter compared with last, the Bureau of Agricultural Economics says in its report on the 1940 dairy outlook. "During the 1939-40 winter feeding season," the report said, "milk production is expected to be about as large as the heavy winter production a year earlier. With increases in the number of cows, the probable trend in milk production will be gradually upward, as long as feed supplies per animal unit remain relatively high."

The Bureau stated that if war continues, "our exports of dairy products, particularly of concentrated milks, may increase," but added that because of tariff changes since the last war a marked increase in exports of butter is less likely than in 1914. Total production of manufactured products for the coming year is likely to continue high but to show little change from 1938 or 1939. Total supplies of dairy products available for consumption during the coming winter will be considerably less than a year earlier because of the lower stocks on hand.

"By January 1, 1940, the number of milk cows on farms will probably be nearly 1 percent larger than the 25,093,000 head a year earlier," the Bureau stated. "This would be the largest number since 1936." Increases in the number of milk cows in the next two years are expected to be more rapid than in the last two years. The number of young stock on farms is more than enough to provide for normal replacements to dairy herds in 1940 and 1941.

Tobacco Outlook

A moderate increase in domestic consumption of American tobacco in 1940, with a substantial reduction in the export market, is indicated by the Bureau of Agricultural Economics in its annual outlook on tobacco. Production of American tobacco in 1939 reached a new high of 1,654,200,000 pounds. The total supply on hand, 3,795,500,000 pounds, also was the largest on record. Supplies of flue-cured and Burley, which normally make up more than 75 percent of the American tobacco production, are the largest on record, and excess of 1939 production over prospective disappearance will result in burdensome stocks in 1940, the Bureau stated.

"With improving business conditions and increasing employment the domestic consumption of cigarettes and cigars will probably continue to increase," the report stated. Exports in 1940 may be greatly reduced because of the war in Europe, the Bureau said, but foreign consumption of American tobacco may be maintained at about the 1939 level by withdrawals from stocks of American leaf abroad.

Snowplows in Fields

Snowplows are now being used to conserve snow on fields, says Dr. Frank Thone, of Science Service. "The technique developed by Prof. H. F. McColly, of the agricultural engineering department of North Dakota Agricultural College,

is to run the snowplow through the fields when the snow is about five inches deep on the level, building up ridges 18 inches high and about eight feet apart. This should be done when the snow is wet enough to pack; if straw and stubble are mixed in, so much the better. The ridges follow contour lines on sloping fields, and in flat country they are made to lie at right angles to the direction of prevailing winds. Between the ridges midwinter snow is not blown away, but is trapped and held, as in the lee of a snow fence. Soil, too, even if not yet covered, is guarded from the scouring blasts. When a thaw comes the ridges, now compacted and perhaps frozen fast to the earth, serve as levees to hold the water and let it seep into the soil, not to rush away as runoff and perhaps carry eroded soil with it."

N.J. Turkey Station "New Jersey's newest agricultural research center, the turkey research station of the State Experiment Station, dedicated last month at Millville, is the first state-supported institution of its kind in the nation," says W. S. Moreland, New Jersey Agricultural College, in Turkey World (November). "Dr. W. C. Thompson, head of the station's poultry department, said that in the research program it will be recognized that 'development of turkey growing again in the East will have to take the form of emphasis on new types of turkey products and on high quality of fresh killed stock from nearby farms, because our production costs are so much greater than those of the West. As a starter, I suggest such products as high quality pedigreed poults, trapnested breeding stock, turkey broilers, family size 8-to-10-lb. turkey roasters, smoked turkey products, quick frozen turkey parts and new, small bodied breeds which will be quickly grown yet fully breasted.'..."

Cornhusking Contest When the custom of the husking bee died out in 1922, says Newsweek (November 13) "Henry A. Wallace, now Secretary of Agriculture but then associate editor of Wallaces' Farmer, an Iowa farm paper, set about devising a substitute. Wallace's plan was a husking contest, designed not only to revive a breath of the old rural America but to take farmers' minds off their work and mortgages. In 1924 this became a national contest, and in the subsequent years it has grown into a national institution, drawing crowds greater than 100,000 almost every year. The 1939 contest was held near Lawrence, Kansas -- site of the University of Kansas -- before a crowd estimated (only estimated because there's no 'gate') at between 100,000 and 150,000. Contestants from eleven corn-growing states worked at top speed. After an hour and twenty minutes, Lawrence Pitzer of Kouts, Ind., emerged as victor with 28.39 bushels -- considerably less than the national record of 41.5 bushels set in 1935 by Elmer Carlson of Iowa."

DAILY DIGEST

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Section 1

November 14, 1939

DROUTH AREA CONDITIONS

Although the first week of November brought little relief from the fall drouth which has persisted for nearly three months over most of the United States, considerable rain was reported a few days ago in the central Mississippi and lower Missouri Valleys, including the eastern half of Kansas. However, there is a general need of moisture, most urgent in the southern Great Plains. The outstanding effect on agriculture, according to reports to J. B. Kincer, of the Weather Bureau, has been the searing of fall pastures, making necessary extensive feeding of livestock in much of the interior of the country, the destruction of late truck and garden crops and a decidedly unfavorable condition for the seeding of winter wheat, especially in the principal winter-wheat producing sections of the country.

HURRICANE LUMBER SALE

A \$14,400,000 transaction, believed the largest of its kind in the nation's history, to buy 600,000,000 board feet of New England lumber felled in last year's hurricane, was announced yesterday by the Northeastern Timber Salvage Administration, according to an Associated Press report from Boston. The purchase was made by a new cooperative of wholesalers, Leslie S. Bean, Salvage Administration Director, said. Mr. Bean reported that timber owners would receive \$24 a thousand feet, a price he termed "considerably higher" than they usually receive. He added that this price may be adjusted semi-annually.

The contract, operative for 4 1/2 years, provides for quarterly payments of \$800,000 and allows dealers a return of 20 percent on their investment. The organization would probably insure distribution of the lumber south to the Potomac and west to the Mississippi, Mr. Bean said. The cooperative association is known as the Northeastern Timber and Marketing Association.

INDUSTRIAL PRODUCTION

A gain in the last year of 1,250,000 jobs among persons in non-agricultural occupations was reported yesterday by Secretary Perkins in a speech opening the national conference on labor legislation. Secretary Perkins said that industrial production this fall has reached "the peak levels of 1929." "A healthy recovery in manufacturing and business began this summer," she said. "This fall industrial production has gone to the peak levels of 1929. That does not mean that employment will be correspondingly quite as high since machine processes are increasingly efficient and the amount of goods produced by each worker averages more than it did ten years ago..." (New York Times.)

Freight Cars and Storage A plan designed to preclude the use of railroad freight cars for storage purposes will be put into effect immediately by the Association of American Railroads, President J. J. Pelley announced recently. "Because of the possibility, under existing conditions, that there will be a substantial increased movement of export freight, the Association of American Railroads, through its car service division, will put into effect at once a plan for preventing any possible congestion at the principal North American ports," Mr. Pelley said. (Wall Street Journal.)

Extension Resources It would be the part of wisdom for farmers to intrench themselves for whatever conditions may come (as the result of the war) rather than to invest in production for uncertain future demand in the face of present ample supplies and prices that are still below parity, says an editorial in Extension Service Review (November) by C. W. Warburton, Director of Extension. "To that end," he continues, "extension workers in every county can do much to advise farm people and to furnish them the facts about the situation which they need in making their decisions. County agents are now at work in all counties of agricultural importance. County home demonstration agents are employed in nearly two-thirds of the counties and many counties have assistant county and home demonstration agents. The men agents have an average of 8 years' experience in extension work and 6 years in the county in which they now work. The women agents have been in extension work an average of 5 years and in their present counties an average of 4 years. These agents have organized and are working with committees of local farm people in practically every county, and they have developed a network of more than a half million voluntary local leaders through whom they can quickly reach farmers in every nook and corner of their counties. Twenty-five years of work in good times and in bad times, in drought, in flood, and through the World War, have provided the Extension Service with a fund of information and experience on which to draw..."

R.R. Forwarder Competition Nine railroads serving eastern territory were given permission recently by the Interstate Commerce Commission to reduce their rates to meet the lower charges of freight forwarding companies on traffic between any points on their lines, says a report in the Wall Street Journal. The action is said to represent the most "wide-open" relief from the prohibitions of section 4 of the interstate commerce act yet accorded by the commission. Section 4 prohibits a railroad from charging more for a short haul than for a longer haul over the same route or in the same general direction, except by special permission. The action may presage a move by these eastern lines to establish their own agency to handle all less-than-carload shipments. The carriers involved are the Pennsylvania, Baltimore & Ohio, Chicago, Indianapolis & Louisville, Detroit, Toledo & Ironton, Long Island, Pittsburgh & West Virginia, Virginian, Norfolk & Western and Western Maryland.

Potato, Bean An increase of approximately 25,000,000 bushels of
Rice Outlook potatoes in 1940 over 1939 is indicated by the Bureau
 of Agricultural Economics in its annual outlook report.
With average yields this would mean a 1940 production of about 384,-
000,000 bushels. Acreage planted to potatoes, which in 1939 was 3,075,-
000 acres, is expected to increase 100,000 acres, or 3 percent. The
commercial acreage in the early and intermediate States is expected to
increase about 10 percent, or 30,000 acres. Growers in the 30 late
States probably will increase the acreage about 3 percent, or 70,000
acres.

The supply of dry edible beans for the 1939-40 season will be about
5 percent smaller than last year's large supply and approximately 15
percent larger than the average for the 5-year period 1933-37, the
Bureau says. Production for 1939 is estimated to be 11 percent smaller
than last year, but carryover stocks of beans on September 1, 1939, are
the largest on record by about 33 percent. Under normal conditions the
acreage planted to beans in 1940 would decrease slightly, the report
said, but with "a somewhat broader demand and an upward trend in prices
as a result of war conditions in Europe and increased industrial activ-
ity in the United States, growers may be inclined to increase their
acreage."

Supplies of rice for the 1939-40 season are likely to be fully as
large as for last season, the Bureau indicates. Relatively large stocks
may again remain at the close of the 1939-40 season. No material in-
crease in demand was forecast.

Tax-Reverted Six hundred thousand parcels of land which reverted
Land Board to the state of Michigan this month because of tax de-
 linquency will be managed under a land board believed to
be the first of its kind, the American Society of Planning Officials re-
ports. In many other states, including California, Arkansas, New Jersey
and Oregon, tax-delinquent properties have been piling up during the
past ten years. California, for example, is making a classification
study of 2,500,000 acres soon to become state's property for taxes, to
determine whether they should be privately owned or be developed by the
state. Two million acres of tax-reverted land in Oregon are undergoing
similar study. The Arkansas Legislature early this year authorized its
Land Commissioner to work with the State Planning Board on the classifi-
cation and appraisal of 2,000,000 acres the state now owns. (The Amer-
ican City, November.)

Food Stamps Extension of the Seattle, Washington, food stamp
 area to include King County is announced by the Depart-
ment, to start November 20. The stamp plan has been in effect in
Seattle since July 3. The population of King County, including 365,000
in Seattle, is approximately 465,000. The number of relief cases in the
county, including 21,000 in Seattle, is about 26,500.

Poultry, Egg Outlook Chick hatchings during 1940 may be somewhat smaller than in 1939, the Bureau of Agricultural Economics indicates in its annual outlook report. Continuation of an unfavorable feed-egg ratio was given as a basis for the forecast. "Almost two and a half dozen more eggs were required to buy 100 pounds of feed in September in 1939 than in 1938," the report said. "The feed-egg ratio will probably continue less favorable to producers than last year and may be less favorable than the 1928-37 average." Poultry marketings in the first half of 1940 probably will be larger than in 1939 because of the heavy 1939 hatch of both chickens and turkeys. In the last half of 1940 they are expected to be smaller than a year earlier because of the decline in the 1940 hatch. Fall and winter broiler production will be somewhat larger than last year's record high production unless relative feed costs increase considerably.

Poultry storage stocks in early 1940 will be larger than in 1939, the report stated. The into-storage movement in late 1940 is expected to be smaller than in 1939 because of smaller marketings. "In the spring of 1940, the effect of increased consumer incomes on prices may offset the effect of the expected larger marketings as compared with a year earlier," the Bureau said. "The expected decrease in marketing in the latter half of 1940 will tend to increase prices as compared with 1939." Laying flocks and total egg production should be somewhat larger in 1940, with a corresponding rise in egg marketings. Egg prices in 1940, however, may be more favorable than in 1939 because of increased consumer income. Turkey production in 1940 will be "somewhat smaller" than the record crop of 1939.

Wheat Milling, Hundreds of flour samples will be baked from 12
Baking Tests varieties of wheat grown this year by cooperators of
the Northwest Crop Improvement Association, says a
Minneapolis report in the Northwestern Miller (November 8). Two hundred and thirty acres of crop land were planted with the 12 types to secure 2,250 bushels of grain needed for determining the milling and baking qualities. These plots are under the supervision of the state extension services on selected farms where all varieties are planted side by side under identical conditions. The flour will be distributed to 20 laboratories for baking tests. The laboratories include those of four state colleges, the United States Department of Agriculture, the Dominion Cereal Laboratory at Winnipeg, and various mill laboratories. Reports made by these laboratories will be assembled and analyzed by the Northwest Crop Improvement Association in cooperation with a score of flour mill chemists and state college authorities. In this manner it is hoped that farmers can be provided with information relating to the most promising new varieties which can be profitably grown, and that untested wheats eventually will be weeded out and replaced by acceptable varieties.

DAILY DIGEST

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Section 1

November 15, 1939

DROUGHT AREA CONDITIONS

Rainfall of the week relieved droughty conditions, temporarily at least, and afforded topsoil moisture sufficient to benefit fall-seeded grains and revive pastures somewhat over considerable areas in the Central Valley States, says the Weather Bureau. Showers were especially helpful in Michigan, the western Ohio and upper Mississippi Valleys, Missouri, eastern Kansas, eastern Oklahoma and Arkansas, and in central and west Gulf sections. The heaviest rains occurred in northeastern Texas, northern Louisiana, Arkansas, Missouri and the eastern third of Kansas. In most of eastern Kansas the weekly totals averaged an inch or more. However, the western Great Plains and localities between the extreme upper Mississippi Valley and Rocky Mountains had practically no rainfall and severe drought conditions continue. In the southwestern Plains, especially western Kansas, the soil is dry, loose and subject to drifting by high winds.

Fall-seeded grain crops were materially benefited by rains of the week over large interior sections, especially the western Ohio and lower Missouri Valleys and extreme southern and southeastern Great Plains. Eastern Iowa had some good showers, but the principal wheat-producing western counties continue dry. This is also true for South Dakota and Nebraska, except the extreme southeastern portion of the latter state. In Kansas good rains in the eastern half of the state were decidedly helpful and wheat has benefited greatly. In Oklahoma recent moisture was helpful, although in the northwest and extreme west there was not enough to be of material benefit.

N.Y. FARM MILK PRICE

A blended price of \$2.27 per hundredweight of milk, an increase of 18 1/2 cents, will be paid dairy farmers supplying the New York metropolitan area for their October milk, E. M. Harmon, administrator of the federal-state milk marketing area, announced yesterday. The chief factor in the sharp rise in the price to the farmers, Mr. Harmon said, was the increase of 22 cents a hundredweight for Class 1, or fluid milk, which became effective October 1, following a referendum among the 61,000 farmers of the area and the distributors. (New York Times.)

COTTON EXPORTS UP

Exports of lint cotton from the United States in October amounted to 886,000 bales valued at \$46,731,000, compared with 649,000 bales at \$35,153,000 in September and 464,000 bales valued at \$23,747,000 in October last year, the Department of Commerce reported yesterday. (Press.)

Wool, Lamb, Increased domestic and foreign demand for wool
Sheep Outlook brought about by the European War and reduced supplies
 of wool in the United States will tend to support do-
mestic wool prices in 1940, the Bureau of Agricultural Economics indi-
cates in its annual outlook report. Approximately the same number of
stock sheep on farms and ranches at the beginning of 1940 as at the
beginning of 1939 was forecast in the report. "Wool prices have risen
nearly 50 percent since August," the Bureau stated, "and it may be
that much of the expected war demand already is reflected in these
prices." Prices of lambs in the 1939-40 fed-lamb marketing season may
average higher than in the 1938-39 season. Slaughter supplies of lambs
in the 1939-40 season are expected to be somewhat larger than in 1938-
39. "However, the effects of the increase in supplies upon prices
will be offset or more than offset by improvement in consumer demand
for meats and higher prices for wool obtained from slaughter lambs,"
the Bureau stated. The trend in sheep numbers during the next few
years may be moderately upward, especially if range conditions in the
western sheep States are favorable.

Part-Time "City families planning to move to the country and
Farming make part of their living from the land, shouldn't make
 the change unless they are willing to do the farm work
for about 13 cents an hour," says R. W. Kerns, Pennsylvania State Col-
lege, in Agricultural Leaders' Digest (November). "This is one of the
conclusions reached by Dr. M. E. John, assistant professor of rural
sociology at the Pennsylvania State College, following a survey of
part-time farming in six industrial areas of Pennsylvania. 'Part-time
farming makes economic contributions to certain classes of people,' he
states. 'This is particularly true of large families having a large
amount of labor that otherwise cannot be marketed. The major contribu-
tion of a part-time farm is the production of food for home consump-
tion. Here again the large family benefits because of the greater need
for such food.' Because of the low monetary value of the labor ex-
pended on a part-time farm, it is not economically sound to use any
labor on the farm that can be employed in industry, Doctor John found
from his survey. However, a part-time farm provides an excellent out-
let for the expenditure of labor during periods of unemployment, after
hours, and for children old enough to assume certain responsibilities
but too young to be gainfully employed in industry. 'Families most
likely to succeed on a part-time farm are those in which either the
husband or wife once lived in the country,' he points out...The average
yearly profit ordinarily does not exceed \$200. Doctor John explains
that, in general, the major source of income is the saving made possible
through the payment of lower rent and also in the savings on goods that
otherwise would have to be purchased..."

Protection of The 1930's have witnessed the emergence of a con-
the Consumer sumer movement in the United States, says Leland J.
Gordon, Denison University, in an article in *The Annals*
(November). He mentions the food, drug and cosmetic act, the amended
Federal Trade Commission Act, the Consumers' Counsel of the AAA, and
continues: "Federal activity on behalf of consumers has been paral-
leled by comparable developments in state legislation. Indiana is the
first state to enact pure food and drug legislation modeled on the new
Federal law, while Wisconsin has decreed that no teaching certificates
will be granted in economics, social studies, or agriculture unless
the applicant has studied the co-operative movement. A course in con-
sumers' and agricultural cooperation is required in the public schools
of Wisconsin from the state university down through the grades...In-
diana and Wisconsin have undertaken legislative efforts to protect
users of the installment purchase plan from excessive charges. In
1935 Maine passed a law which forbids the sale within that state of any
cosmetic preparation which has not been registered and granted a cer-
tificate by the Department of Health and Welfare. A more positive form
of aid to consumers was launched in Michigan in 1938 with establish-
ment of a Consumers' Bureau in the Department of Agriculture. The
announced purposes include supplying consumers with specifications for
any article they wish to buy, securing standardized consumers' goods,
increasing the factual content of labels and advertising, and protect-
ing consumers against inferior merchandise and profiteering. More
aggressive in purpose is Minnesota's Consumers' Division, which has
power to investigate prices of consumer commodities and services and
to publicize production and marketing costs, as well as the profits
of each manufacturer and handler. There have been fewer new develop-
ments in local governmental units. A notable illustration of a posi-
tive consumer service is found in New York City's Consumer Service
Division. Daily market information is gathered and broadcast, and
cooking schools are conducted..."

Farm Family Farm families probably will have higher net incomes
Incomes in 1940 than in 1939, the Bureaus of Agricultural Eco-
 nomics and Home Economics say in an outlook report.

Total receipts from marketings of farm products are expected to in-
crease, reflecting improvement in industrial activity and in consumer
incomes. Values of products for farm home consumption also will be
higher. Farm production expenses will rise, too, the report said, but
less rapidly than gross receipts; hence, net returns from farming
probably will increase more, relative to 1939, than gross income. In-
come from Government payments are expected to be about the same as in
1939, but non-farm earnings of family members may increase with greater
opportunities for employment. Most farm families will be able to buy a
somewhat better living in 1940 than in 1939 if the anticipated improve-
ment in general business conditions materializes.

Management of Tax-Reverted Land "Michigan is introducing a new method in managing land which reverts to the State through tax delinquency," says an editorial in the Florida Times Union.

"Six hundred thousand parcels will be managed by a newly authorized land board...In addition to the 600,000 parcels, there are about two millions acres of cut-over timber land in the northern part of the State under management of the State Conservation Department. Under the plan of the land board, efforts will be made to return as many of the lands as possible to private ownership...Lists of the properties are to be prepared for the purpose of conducting public sales in February of each year, with bids to be accepted as low as only 25 percent of the assessed value for the year preceeding the vesting of title in the State. Money from the sales will go to each taxing unit in proportion to the outstanding taxes cancelled when the State gained title to the land. Municipalities also are given the opportunity to bid individually or collectively for lands they want for public purposes, and may ask that sale of any parcel be delayed for a year if they plan to purchase it later. Former owners will be given 30 days after the public sale to meet the highest bid and thus regain their land..."

Civil Service Examinations The Civil Service Commission announces the following examinations; No. 119, unassembled; Associate Textile Engineer, \$3,200, Assistant Textile Engineer, \$2,600, (Experimental Apparatus Development, Cotton Fibers and Textiles) Agricultural Marketing Service; No. 118, assembled; Junior Engineer, \$2,000 (All branches of engineering). Applications must be on file not later than (a) December 11, if received from States other than those named in (b); (b) December 14, if received from the following States: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Flaxseed Harvests Texas farmers have finished harvesting the first commercial acreage of seed flax grown as a winter crop on more than 15,000 acres in the coastal area of South Texas. Much of the acreage in flax has been used previously for cotton. The U. S. Department of Agriculture cooperated with the state agricultural experiment station in the experimental plantings which aroused interest in flax-growing in southern Texas. In California also the flax harvest has been completed, and the total seed production probably will be more than twice as great as in any previous crop. In California, flaxseed growing is a relatively new enterprise, confined almost entirely to irrigated lands in the Imperial and San Joaquin valleys. The new industry has resulted from introduction by the United States Department of Agriculture of the Punjab variety, a selection from Indian seed flax. (Florida Grower, November.)

DAILY DIGEST

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Section 1

November 16, 1939

PAN-AMERICAN COOPERATION The existence in the Western Hemisphere of a reservoir of capital, sufficient to develop natural resources capable of profitable exploitation to "tide over immediate emergencies" arising from the war in Europe, was asserted yesterday by Sumner Welles. Under Secretary of State, in accepting the chairmanship of the Inter-American Financial and Advisory Committee at its first meeting. Mr. Welles said the committee should strive to promote the following aims: "To increase healthy trade between us; to improve the monetary and financial mechanism by which trade and other commercial transactions are facilitated; to stimulate the employment of capital in such productive directions as may be found sound; to improve, not only immediately but permanently, the means of transport and communications between us; and to make more fully available among all of us that kind of technical ability and experience which has now become so important." The assistance would be financing scientific studies and investigations, pooling of experts and similar advisory steps similar to what the Department of Agriculture does in this country. (New York Times.)

An Associated Press report from Guatemala City says the monetary committee of the Pan-American Treasury Conference last night approved in principle a Colombian proposal for establishment of a central bank supported by banking resources of the Americas to stimulate economic development.

EMPLOYMENT ON FARMS The total employment of both family and hired workers on farms on November 1 was estimated by the Department of Agriculture yesterday at 10,762,000, the smallest November 1 total recorded in the 14 years covered by the survey and comparing with an employment of 11,166,000 last November and a 10-year average from 1929 to 1938 of 11,413,000. It was estimated that of the total, 8,123,000 were farm operators and unpaid family workers. The decline in this group accounted for most of the November drop, for the decline in hired workers was somewhat less than usual. (Press.)

EROSION CONTROL POPULAR IN WEST A survey of farm opinion in the Midwest and Southwest made by the Christian Science Monitor shows erosion control to be the most popular of all government projects launched by this Administration in behalf of the farmer, according to a report from the Chicago bureau of the Monitor.

Fruit and Vegetable Inspections Shipping point inspections of fruits and vegetables by Federal-State inspectors continue to increase. For the fiscal year ending June 30, the Agricultural Marketing Service reports a total of 456,394 cars, over 6,000 more cars than were inspected at shipping points during the preceding 12 months. Any party to the purchase and sale of an inspected shipment may request reinspection. For the more than 450,000 cars inspected during the past season, however, requests for only 271 reinspections were received. Of the 271 appeal inspections requested and made, 208 reversed the opinions of shipping point inspectors; in 63 cases their opinions were sustained. "These results indicate," the Service says, "that the fruit and vegetable industry has become so familiar with the Federal grades that appeal inspections are requested only when it is rather certain that the grade of a car will be reversed." Decay, breakdown, scald, and other factors which develop in transit do not mean that the shipping-point inspections are incorrect. If the defects are abnormal at destination and due to lack of suitable condition at time of shipment, they are held under the Perishable Agricultural Commodities Act regulations to be the responsibility of the shipper.

Outlook for Truck Crops A record 1940 production of commercial truck crops for fresh-market shipment, together with an improvement in demand, is indicated by the Bureau of Agricultural Economics in its annual outlook report. "The improvement in demand probably will result in slightly higher prices of these crops as a group and a larger total cash income to producers," the Bureau said. The total truck crop acreage probably will increase slightly, continuing the upward trend that has been in progress during the past 20 years. Snap beans, beets, cabbage, cantaloups, carrots, cauliflower, celery, cucumbers, eggplant, peppers, tomatoes, and watermelons are expected to show an increase in acreage in 1940 over that harvested in 1939. Decreases in the acreage of lima beans, lettuce, onions, and green peas were forecast.

Total supplies of processed vegetables available for consumption during the 1939-40 season are considerably less than the unusually large supplies of the last two seasons, the Bureau says. Production of 11 truck crops for manufacture in 1939 was about 23 percent below that of 1938. Because of the record carry-over of canned vegetables at the beginning of the 1939-40 season, however, total supplies, though probably about 12 percent below the high level of 1938-39, exceed the recent five-year average consumption. Substantial increases in the acreages of most truck crops for manufacture in 1940 will be required to cover average consumption requirements in 1940-41 and provide average carry-overs.

Prospects for Fruits, Nuts Consumer demand for fruits in the United States during 1940 is expected to be slightly higher than in 1939, the Bureau of Agricultural Economics says in its annual report on the fruit outlook. The Bureau added, however, that the beneficial effects of this increase in domestic demand may be largely offset by curtailment of exports due to larger fruit crops and war conditions in Europe. The average combined production of all fruits during the next five years probably will be larger than the average for the 5-year period, 1934-38. Production during the 1939 season is indicated to be well above the 1934-38 average. During the next five years significant increases are expected in the production of grapefruit, oranges, and lemons. Moderate increases are anticipated for peaches, pears, and cherries; and grape production probably will increase slightly. The trend in apple production is expected to continue downward at a moderate rate. Dried prune production probably will decrease moderately. No significant changes are expected in the average production of other fruits.

Combined production of walnuts, almonds, pecans, and filberts in the United States is expected to continue "moderately upward" during the next few years, the Bureau says. The combined 1939 production of approximately 111,900 tons is 20 percent more than the 1938 crop and 18 percent more than the average for the five years from 1933-37. Little if any increase in prices received by growers is believed to be likely in the next few years.

Reserve Silage "In the fall of 1938 Stanley Witzel and Gus Bohstedt, of the University of Wisconsin College of Agriculture, decided to try an experiment with the surplus corn on the University farm," says Joseph E. Ryan, in Country Gentleman (December). "On an elevated point in a field they dug a trench 50 feet long, 8 feet wide at the bottom, 12 feet wide at the top, and 8 feet deep. This trench was filled with 90 tons of corn silage. A horse was used to pack the silage during the filling process. When filled, the trench was covered with straw and two feet of soil. This trench silo was not touched until the fall of 1939. Then one end of it was opened. The contents had a fresh, wholesome odor and the heavy seal and effective tramping had prevented any top spoilage. Dairy cows found the feed palatable. After this test the end of the silo was resealed. It is planned to preserve this silage for as many years as possible to determine whether trench silos of this kind are practical for the storing of surplus corn in abundant years until drought or other cause of lean crops makes the reserve feed valuable. Silage has been successfully kept in standard upright silos for as long as five years on the University farm, and it is hoped that this emergency storehouse will serve equally well."

Normal and Accelerated Erosion "With the increasing public interest in erosion, there is danger that normal erosion be confused with man-accelerated erosion and man-induced erosion," says R. J. Preston, Colorado State College, in an article on soil erosion, in the Journal of Geography (November). "Erosion, a process as old and continuous as the earth itself, is nature's effort to make flat the surface of the earth...It was natural erosion that, through the ages, built up the delta of the Mississippi; that enabled the Colorado River, carrying sediment that had been carved from the gorge known as the Grand Canyon, to fill in a portion of the Gulf of California thus separating the northern part, now known as the Imperial Valley and Salton Sea, from the Gulf itself; that, in short, has determined the final form of all topographic features prior to the invasion of civilized man. Under these natural conditions a nice balance had been achieved between soil erosion and soil formation. The vegetal covering and the soil protected by it had reached a mutually dependent condition through the long ages of their concurrent development. Over the major portion of the land the rate of soil formation exceeded the rate of soil removal, as evidenced by the gradual accumulation of soil. But the rate of increase was very slow. During the eons in which the building process had been going on, the soil mantle in the United States had reached an average thickness of only a few feet, while the true topsoil, the layer containing the humus with its life-giving fertility, averaged only about seven inches in depth. Into this stored fertility of ages came civilized man (the Indians did not change the virgin character of the land surface in North America). The delicate balance was upset and the rate of erosion increased many hundred fold..."

Sweetpotato Dehydration A pilot plant for dehydrating sweetpotatoes, which is being constructed at Denton (Texas) and will be operated under the direction of G. C. Wilson, of North Texas State Teachers College, will be closely watched by farmers and industrialists all over the South, says the San Antonio Express. Its capacity will be two tons a day. That experimental mill -- set up on the college campus -- will afford the first trial of the new process on something like a commercial scale. A press reputedly removes the water and water-soluble salts from the tuber, so that potatoes can be stored for an indefinite period without risking spoilage. Great drawback to handling the sweetpotato heretofore, for starch-making or any other commercial or industrial purpose, has been its lack of keeping qualities. If the new process proves as practicable commercially as it proved in the laboratory it will open the way to growing that crop on large areas of sandy land in East and South Texas -- acreage which is unprofitable for ordinary field crops.

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DAILY DIGEST

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Section 1

November 17, 1939

HIGH COTTON CONSUMPTION Near record consumption of cotton by American mills during the last three months was reported yesterday by the Census Bureau. Consumption during October amounted to 686,936 bales, a record for the month. This brought the total for the first three months of the season to 1,940,956 bales. In October last year 543,857 bales were consumed and in the three-month period 1,636,665 bales were used. (Press.)

LUMBER DEMAND UP Demand for lumber this year will exceed production by 500,000,000 feet, according to estimates of consumption and output made public yesterday by the lumber survey committee of the Department of Commerce. Consumption was put at 26,000,000,000 feet for the full year, an increase of 18 percent from 1938 and slightly above 1937, and output was estimated at 25,500,000,000 feet, an increase of 18 percent from 1938 but a decrease of 2 percent from 1937. The committee reported that the outbreak of war in Europe led to hasty replenishment of low inventories of lumber in retail yards and among industrial consumers. (Press.)

MARSHALL FOREST AREA A national forest recreational feature will be named for Robert Marshall, chief of the Forest Service's division of recreation and lands, Secretary Wallace said yesterday in paying tribute to Mr. Marshall, who died Saturday. "The Department of Agriculture and the cause of conservation have suffered a distinct loss in the death of Marshall," Mr. Wallace said. "Bob Marshall was one of the nation's leading exponents of maintaining forest recreation values in our national life..." (Press.)

BAR FRUIT IMPORTS A single war economy order issued concurrently yesterday by Great Britain and France cost United States fruit growers prospective business for this season amounting to nearly \$15,000,000, says a report in the New York Times. These two countries barred until further notice imports of fresh apples and pears on the ground that foreign exchange is needed more for war materials than for such fruits. The orders will permit completion of contracts shipped prior to November 20.

State Trade Barriers The Washington Post (November 15) in an editorial on interstate trade barriers, says in part: "An encouraging note is the growing awareness of their dangers. Numerous articles on the subject have been written in recent months. Deserving mention is a pamphlet entitled 'State Trade Walls,' by F. Eugene Melder, recently published by the Public Affairs Committee. Mr. Melder notes a definite tendency on the part of State legislatures to 'put on the brakes' against legislation blocking trade across State boundaries. Determined efforts are also being made to modify restrictive laws already on the books. Mr. Melder puts the problem of removing local trade barriers squarely up to the States. He mentions the practice of adopting uniform laws, and interstate compacts, as useful means of settling differences between State governments. 'If the States muff their chance by refusing to act, ultimately the Federal Government,' he reasonably predicts, 'will be forced to act in the interest of national welfare and at the cost of States' "rights!"

Fats, Oils Production of fats and oils from domestic materials
Production in 1940 is likely to be the largest on record, the Bureau of Agricultural Economics indicates in an outlook report. Increased production of lard, soybean oil, linseed oil, and grease will much more than offset decreased production of cottonseed oil. Stocks of fats and oils on July 1, 1939, were unusually large, the Bureau said. With record supplies of domestically produced fats, import requirements for vegetable oils and oilseeds are considerably less this year than those of a year earlier. "Despite large domestic supplies, domestic prices of edible fats and oils in 1940 are expected to be somewhat higher than in 1939," the report added, "since both domestic and foreign demand probably will be strengthened as a result of increased industrial war activities."

Clover and About 2,300,000 acres for the production of clover
Alfalfa and alfalfa seed in 1940 probably will be "fully ample" for the expected sowing requirements of 1940-41, the Bureau of Agricultural Economics indicates in its annual outlook report. This is approximately the acreage of clover and alfalfa seed in 1939. Supplies of clover and alfalfa seed this fall are somewhat smaller than in 1938, but a little larger than usual. Prices of red and alsike clover seed are respectively about 10 and 40 percent higher than in 1938, but about 25 and 15 percent lower than the 1933-37 average. Prices of alfalfa seed are slightly below last year's prices, but slightly above average. Prices of sweetclover seed are about the same as a year earlier, but about 30 percent below average.

Skinning Peanuts

Home economists in the Department of Agriculture have developed a commercially practical way to remove peanut skins with low weight loss and no splitting, and still have a nut high in quality. They believe this method will improve the keeping quality and flavor. The shelled nuts are dipped in a 1 percent hot lye (sodium hydroxide) solution for about 8 seconds, just long enough to moisten the skins. They are then dipped immediately into a cold 1 percent solution of hydrochloric acid to reset the dissolved pigment in the skins and keep it from staining the nuts. The nuts are then rinsed in cold water and the skins easily removed by hand. Peanuts skinned in this way retain their smoothness and gloss and keep much longer than those blanched either with hot air or hot water. The weight loss is low -- 3 to 6 percent as compared with around 18 percent for the usual commercial hot-air treatment. (Florida Grower, November.)

More Lean in Bacon

"Swine breeders are constantly seeking a type of hog with more lean meat in the bacon," says an editorial in The Southern Planter (November). "Popular breeds in this country are notorious for their tendency to store too much fat in the bacon strip. Pork producers in Denmark have apparently solved this problem with the Danish Landrace breed, some of which were imported several years ago by the United States Department of Agriculture for purely experimental purposes. None was to be released to commercial breeders...Experiments are underway at Beltsville, Maryland, and at several points in the Corn Belt to breed this tendency toward lean bacon into strains of American breeds of hogs."

Vitamin Test Case

An Indianapolis report in Food Field Reporter (November 13) says vitamin capsules distributed by Kroger Grocery & Baking Co., through grocery outlets are accessory foods and not drugs, and therefore their sale may not be restricted to drug stores, Judge Herbert Spender, Marion County Superior Court, ruled recently. Judge Spender's decision came in an action brought by Kroger to obtain a declaratory judgment setting aside regulation by Indiana State Board of Pharmacy that restricted sale of vitamin capsule products to stores operated by registered pharmacists. Chief points of issue were whether the board had the power to pass such a regulation, and whether the capsules were actually drugs or foods. Attorneys of both sides agreed to accept the definitions of drugs and foods as contained in the new Federal, Food, Drug and Cosmetic Act, and specified by the new Indiana Food, Drug and Cosmetic Act as valid in that state.

Classifying Freight Rates "All summer a committee of three experts has been busily engaged in reclassifying the thousands of kinds of articles which are shipped over the railroads of this country -- a tremendous task," says the Dakota Farmer. "Everyone who ships, be he farmer or businessman, has on occasion been annoyed because of difficulty in finding out the exact freight rate which applied to his shipment...The consolidated freight classification in effect on American railroads is a book of 500 pages, covering more than 15,000 different classes of commodities with varying rates. The aim of the present committee is to reduce that number, simplify shipping rules and regulations, and whip the whole subject into shape more easily interpreted and applied by both shippers and the railroad men themselves. It is an excellent move."

Two-Quart Containers "The milk problem in the United States is one of distribution rather than production," says an editorial in the New York Journal of Commerce (November 10), "and it is therefore interesting to find the larger distributors in this area offering an improved system of home delivery that will reduce the price a cent and a half a quart...The companies propose to deliver milk in two-quart fiber containers. These rectangular, paraffin-lined vessels are sanitary, occupy little if any more space in a refrigerator than the one-quart bottle and may be thrown away. The companies save, of course, on processing, handling and reduction of the milkman's trips to the one-quart-a-day families. Housewives can still buy milk in quart bottles, but will have to pay a cent and a half more..."

Moth Killer for Orchards An electric moth killer, invented by Frederick K. Kirsten, of the University of Washington, consists of a metal cylinder containing a transformer and having on the outside two electric rings. The top ring is a red-glowing neon lamp and the lower one is filled with mercury vapor and gives a blue light, rich with invisible ultraviolet rays. The red attracts the moths. As soon as they come near, the ultraviolet rays from the lower blue ring partially disintegrate them. Elmer Kinyon, apple-grower of Naches, Wash., installed three fixtures last spring. Data sheets were carefully kept, and it was found that lights had attracted and killed as many as 450 codling moths each, together with several thousand other varieties of moths, winged aphids and flies. Examination of the moths by entomologists indicated that they had been killed before they laid their apple-destroying eggs. (Science Service.)

4-in-1 Mill A new hammer mill can be adjusted, on the same base, to do four different jobs. It will grind small grain and it can be converted to crush ear corn, handle stalks and other roughage and blow molasses silage high enough to fill a 60-foot silo. (Country Home, December.)

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Section 1

November 20, 1939

WALLACE ON SOIL CONSERVATION The Agriculture Department is preparing to require farmers to take better care of their farms to be eligible for the benefit payments of \$500,000,000 annually, Secretary Wallace told the concluding session of the Association of Land Grant Colleges and Universities. "As soon as the farmers themselves really understand the needs of their soil," he said, "it will be possible to make AAA payments conditional upon full protection of farms against wind and water and erosion." Changes in the program to be announced shortly, however, will merely place greater emphasis on "proper" farming practices.

"Land is still wearing out faster than we are able to restore it," Wallace said. The European war makes it doubly important, he added, that this country build up a strong defense against waste of its farm resources because of the possibility that the economic cycle of the last war will be repeated. "Fair prices are essential and must continue to be a primary objective of public programs," he said. "But good prices, good income and conservation should be wholly compatible and inseparable. One should not sacrifice the other."

Dr. F. D. Farrell, president of Kansas State College, was elected president of the association, succeeding Dr. Julian A. Burruss, president of Virginia Polytechnic Institute. (Washington Post.)

ROCHESTER FOOD STAMPS Rochester (N.Y.) bankers who voted to levy a 1 per-cent service charge on the clearance of the government's surplus food stamp cards through their institutions were warned by the Department of Agriculture that if the decision was carried out on December 1 as planned, the stamp experiment in Rochester would end, says a report in the New York Times. The letter, signed by Milo Perkins, president of the Federal Surplus Commodities Corporation, recalled that the stamp plan, started first in Rochester last summer, has brought an estimated \$1,000,000 worth of annual new business to grocers in that city, benefits which he held were felt in many other lines of business.

Pointing out that the plan is now in effect or about to go into effect in a score of other communities through the country, Mr. Perkins added: "We feel sure that bankers in other parts of the country will serve the grocers of their towns as they have been served by their banks during the past six months in the cities where the stamp plan has been in operation."

Science in America "Americans may well be proud of the increased knowledge and improved techniques that have crowned the labor of men and women trained in American institutions and working in American laboratories," says Kirtley F. Mather, Harvard University, in an article in *Frontiers of Democracy* (November 15). "There are nearly 20,000 members of the American Association for the Advancement of Science; more than 22,000 chemists in the American Chemical Society; approximately 105,000 physicians and surgeons in the American Medical Association; nearly 3,000 geologists in the Geological Society of America and the American Association of Petroleum Geologists; about 2,200 physicists in the American Physical Society; more than 1,200 botanists in the Botanical Society of America; about 800 zoologists in the American Society of Zoologists; approximately 43,000 engineers in the four largest national organizations of civil, mining, electrical and mechanical engineers. The 1938 edition of the Biographical Directory of American Men of Science contains the names of about 28,000 men and women. The first edition, in 1906, listed about 4,000. This directory, however, is intended 'to include only those who have carried on research work in the natural and exact sciences'; it does not profess to cover the fields of engineering, medicine or other applied sciences. The National Research Council lists 930 scientific and technical societies in the United States and its dependencies, most of which are responsible for the promotion of research in some locality or in some special phase of science. Although there is much duplication of membership in these various scientific organizations, it is probable that more than 200,000 citizens of the United States are qualified by training and experience for the label of professional scientists in the broader sense of the term. Here is a veritable army, competent to win major battles as well as minor skirmishes in the eternal struggle to make the most satisfactory adjustments possible between the life of man and the environment in which men must live..."

Cactus Pasture Spineless cactus is now being groomed to replace the prickly pear which had been rapidly encroaching on the range land of the Southwest. W. H. Dameron, superintendent of the Experiment Station at Sonora, Texas, has four acres of an attractive new spineless variety which was found growing wild some years ago. He plants it in rows 10 feet apart and grows sorghum between the rows, for a year or two, to keep down the weeds. Once the new variety is established, it is grazed every fifth year. Spineless cactus makes excellent livestock feed, when supplemented with hay and cottonseed meal. (Country Home, December.)

Chloropicrin Because of the interest that has developed in
Soil Fumigant the use of volatile chemicals for partial soil steril-
 ization the Rhode Island Experiment Station has studied
the use of chloropicrin, say Messrs. Stark, Smith and Howard, of the
station, in Soil Science (November). Summarizing the studies, they
say: "Low dosages of chloropicrin were found to have little effect on
nitrate formation; but, as the dosage was increased, nitrification was
inhibited. The length of the inhibition period was dependent on the
dosage of chloropicrin. In no case was ammonification inhibited;
therefore, in some instances the inhibition of nitrification resulted
in an accumulation of ammonium nitrogen. The total amount of nitrogen
made available for plant growth was not materially increased except
where high dosages of chloropicrin were used. In view of the data ob-
tained from this experiment the increases in plant growth obtained by
treating the soil with low dosages of chloropicrin cannot be accounted
for solely by the hypothesis that more nitrogen was made available for
plant growth."

New Apples A new variety of apple, the Edgewood, has this
Resist Drop year again proved unusual capacity for resisting pre-
 mature drop, says American Fruit Grower (November).
Drops amounted to 60 percent or more on varieties like Jonathan,
Delicious and Grimes. The Edgewood, it says, "originated as a seed-
ling of the cross, Salome x Jonathan, at the Iowa Agricultural Experi-
ment Station. It is well adapted to growing wherever Jonathan does
well. The fruit averages larger than Jonathan and is not quite so
red as Jonathan. It is a firm-fleshed, late-keeping apple with the
crisp texture, sprightly flavored juice of Jonathan. In storage, the
fruit is entirely free of Jonathan spot and keeps two months longer
than Jonathan. Secor is another new variety out of the same cross as
Edgewood. The fruit of Secor hangs to the tree 10 to 14 days longer
than Jonathan, is larger in size, has fair color and possesses top
quality. It, too, is a good storage apple. The trees do well wherever
Jonathan does. Growers are interested in both of these new varieties
and small plantings for commercial production are being made..."

Plastic Industrial adhesives are being made increasingly
Adhesive of synthetic plastics. Older kinds of adhesives such
 as casein and animal glue are still employed for join-
ing together large parts of wood furniture. But for small light parts
of metal, phenol fiber, and ceramic materials, synthetic plastic ce-
ments are satisfactory. They avoid use of bolts, screws, etc. In
making telephones and other communication apparatus, resin-cellulosic
lacquer adhesives and vinyl and acrylate polymers give strong tough
joints affected little by moisture, corrosion or mildew. (Science
News Letter, November 18.)

Farm Tenant

The Farm Security Administration has announced that tenants buying farms during the first two years under the Bankhead-Jones Farm Tenant Act are building 2,056 homes at an average cost of only \$1,313. Altogether 6,180 tenants, sharecroppers or farm laborers obtained loans for the purchase of farms of their own. The farms averaged 134 acres. The loans were made large enough to finance necessary improvements.

Very few were able to find fully developed farms for reasonable prices. Virtually all bought unimproved farms or farms with run-down buildings and had to borrow enough to improve their land or buildings. In all cases, however, the FSA limited the improvement loans to the minimum required for family shelter and operation of the farm. Most of the borrowers found farms with houses that could be repaired. More than half of them, or 3,726, repaired the homes at an average cost of \$378. But a third of the buyers purchased farms on which there were no homes, or on which the shelters were so dilapidated that it was cheaper to rebuild than to repair.

These 2,056 farmers obtained their new homes at an average cost of only \$1,313 by using the simple plans and construction methods worked out by FSA engineers during the past five years in building more than 12,000 houses. This price of \$1,313 usually provided for five rooms, a screened work porch, and a front porch, with wiring for electricity. It included profits for the contractors and suppliers of materials, and permitted the payment of prevailing wages to labor. Nearly all the borrowers obtained additional funds for construction or repair of out-buildings and barns. These costs averaged \$439 for 5,725 owners. More than two-thirds borrowed enough also to make some improvements to their land. These costs averaged \$181 for 4,334 farmers.

The average borrower spent \$5,369 for his farm, of which \$1,198, or 22 percent, went for improvements to the land or buildings. This figure varied materially from region to region. The highest average for improvements was \$2,556 in Montana. The lowest was \$231 in Arizona. Most of the Southern States, where less expensive housing was required but where more new homes were needed, averaged slightly above \$1,000. Land improvement costs ran highest in California, where the average was \$678, and lowest in Arizona, where there were none on the six farms purchased.

New Screwhead

A new type of screw has a head which takes a screwdriver with a four-angled point. This design gives a more centralized contact with the driver so there is less danger of slippage. The new screws are easier to turn and are so standardized that four sizes of drivers will handle all sizes of screws. (Country Home, December.)

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Section 1

November 21, 1939

COTTON PRICES, SPINNINGS Another sharp rise in cotton in Liverpool carried prices on the New York Cotton Exchange into new high ground yesterday and left the list with gains 9 to 17 points, compared with Saturday. Differences between Liverpool and New York widened about 1/4 cent a pound, which stimulated arbitrage buying in New York. Taking into consideration an export subsidy of 1 1/2 cents a pound, it is estimated that the Indian staple is selling relatively \$10 a bale or more above similar grades of cotton grown in the United States. (New York Times.)

The Census Bureau yesterday reported that the cotton spinning industry operated in October at 97.9 percent of capacity on a 2-shift 80-hour basis, compared with 92.5 percent in September this year and 81.9 percent in October last year. The figure for October 1939 is the highest for any month since the present system of averages was introduced in 1935. (A.P.)

SYNTHETIC THREONINE Cheap production of a protein constituent essential to the maintenance of human and animal life was announced by Prof. Henry B. Hass, head of the department of chemistry of Purdue University, at a meeting of the Rochester section of the American Chemical Society last night. Hitherto sold at a price nearly three times that of gold, this substance, called threonine, can now be synthesized simply and economically from coke and water, Professor Hass said. Recently shown by Dr. William C. Rose of the University of Illinois to be indispensable to life, threonine promises to be of great importance in nutritional studies. (New York Times.)

PAN-AMERICAN CONFERENCE The first Pan-American Treasury Conference yesterday adopted several resolutions designed to promote trade among the 21 American republics, says a Guatemala report by the United Press. The resolutions adopted concerned a declaration providing for the investment in Latin-American countries by the United States of "essential capital," the development of American economic relations, establishment of a single monetary standard in the Americas, exchange of government fiscal information, particularly that related to the organization and operation of social security institutions, and exchange of information on the monetary, banking and exchange structure of the several republics.

Poultry
Mortality

J. Holmes Martin, director of the Department's poultry research laboratory, East Lansing, Michigan, writes on poultry mortality, in *Veterinary Medicine* (November), a special issue devoted to diseases of poultry. A glance at the poultry mortality situation during the past 25 to 30 years shows that many of the results of research which have been put into practice have led to considerable reduction in embryo mortality and chick mortality, he says, but the laying house mortality has increased with staggering rapidity. "Much valuable research by pathologists and bacteriologists has been interpreted into practice through the testing and eradication programs that have brought about a very considerable reduction of mortality from pullorum disease and tuberculosis. The knowledge of the life cycles of internal parasites and their intermediate hosts brought to us through the studies of parasitologists has led to the adoption of sanitation practices and range rotations that have greatly reduced the hazards of rearing chicks. Vaccination has in some cases, notably fowl pox and laryngotracheitis, produced an artificial immunity to carry the bird past the period of its greatest susceptibility. Management practices, when wisely followed, aid greatly in lessening the exposure of the flock to diseases and parasites. Control of coryza and chick bronchitis depends upon segregation and the avoidance of exposure through good management, rather than upon building up resistance through breeding, vaccination, or otherwise. Sanitation is of paramount importance in good husbandry. A veterinarian, pathologist or parasitologist who has spent much time in the study of animal diseases can many times detect possible avenues of entrance of disease that would not be apparent to the layman. The pathologist is aware of the tremendous amount of research that has been carried out with drugs and other products known to be effective in the treatment of diseases of mammals, but still of questionable value in the treatment of poultry diseases. Except for use in the elimination of certain internal and external parasites, drugs and medicines have not proved to be of great value to the poultryman. In case of an outbreak, the procedure for further necessary sanitation practices to avoid spread should be determined immediately. In view of the progress that has been made in successfully combating certain of the principal diseases, why this increase in mortality has occurred has become a challenging question..."

Articles

Survey Midmonthly (November) contains the following articles: "When You Work for the Government" by William Hodson, Commissioner of Welfare, New York City; and "Training for Rural Social Work" by Hazel A. Hendricks, Field Consultant in Child Welfare, Children's Bureau.

Size of
Farms

Writing under the title, "How Big Should the Farm Be?" William G. Roylance, in the New Republic (November 22) says in part: "It appears that imperatively needed soil-conservation policies require that over a considerable part of the wheat and corn belts, more land will have to be devoted to forage or pasture and less to harvested crops. This will probably tend in the course of time to increase the size of farms in these areas. On the other hand, agricultural science is demonstrating that acre yields may be greatly increased, by proper seed selection, soil treatment and use of fertilizer. And this is not all. Agrobiologists estimate 'penultimate' yields at nine times the actual average for corn, 11.9 times for wheat, 13.2 times for oats and 14.7 times for cotton. This would greatly increase the output per worker or per family on a given acreage, or, conversely, reduce the acreage required for a given output. If the penultimate yields could be realized, 15 acres of corn, 25 acres of wheat, 13 acres of oats or 8.7 acres of cotton would yield a gross income of \$2,000 at the price averages of 1926-30, if available efficiencies of cultivation were used. Thus the small farm, whether for profit, for the family living, for the supplementing of income from other sources, or as an avocation, may yet come into its own. But the small farm of the future will be a very different thing from the existing peasant farms of the old world, which too often are taken as models by those who seek security in isolation, and who would cure the ills incident to economic growth by tearing it out by the roots."

Exports to

Harry L. Hopkins, Secretary of Commerce, has announced that increased purchases from Latin America, which has been cut off from some European markets by the war, caused an increase in this country's exports last month. He said preliminary figures for October showed that shipments were worth \$323,000,000, which was 14 percent more than in September and 18 percent more than in October of last year. Shipments to Cuba, Mexico, Argentina, Brazil, Colombia, Chile and Venezuela aggregated \$47,017,000, or more than \$11,000,000 in excess of the value of the merchandise sold those countries in September. In the commodities, increased exports were reported for raw cotton, fruit, machinery and chemicals. Decreases included leaf tobacco. (Associated Press.)

Hubam as
Cover Crop

Hubam, Iowa's annual sweet clover, is finding a new place in the South where it is being grown as a winter cover crop in root rot infested areas. Hubam is grown in the winter while the root rot is dormant and is plowed under before June 1. (Country Home, December.)

Maine Seed Potatoes

"Under the state-sponsored certification program, Maine growers have attained nation-wide prominence as producers of good seed potatoes," says an article in New England Homestead (November 18), "but beginning with the 1938 crop a new and more drastic plan was instituted, known as the foundation seed program. It is under supervision of the Maine Experiment Station and has the direct guidance of Dr. G. W. Simpson, state pathologist. This season the new program included only 240 acres for the entire state...The potatoes have to be planted early and by the tuber-unit method. Spraying must follow the most careful routine. In addition, the grower pays \$15 an acre for supervision and for a roguing service provided by the experiment station...Early harvest is also a requirement. The tops are pulled during the first two weeks of August and then, after a period of ten days during which the skins set and the potatoes harden up, the crop is dug. Storage methods are carefully prescribed, and the rules even go so far as to stipulate that no seed stock developed and approved under the foundation seed program shall be offered for sale outside the state until the supply exceeds the demand for such seed within the state..."

Future Farmer Competition

In a recent competition among 3,000 chapters of the Future Farmers of America in the South, the Moultrie (Georgia) chapter won first place, reports Ralph McGill in the Atlanta Constitution. "Their record included, in a year's work, the purchase of 14 feeder steers, producing feeds, and co-operative selling of 26 beef cattle, 297 hogs and a car of watermelons. They beautified school grounds, planted 671 shrubs, exhibited at fairs, and promoted their work. They each had an enterprise on their home farms. They learned to repair machinery, correct erosion, treat diseases of hogs and cattle. They aided 275 families in canning 44,560 pints of food; aided 125 farms in establishing sanitary setups for hogs; planted 17 home orchards; landscaped 15 home grounds; terraced 3,260 acres, set up exhibits at five fairs. They assisted the negro farmers of their community..."

Jurisdiction of Game

Federal Judge I. M. Meekins ruled recently that the Federal Government has exclusive jurisdiction over game in the Pisgah National Forest and granted the United States a permanent injunction restraining North Carolina from interfering with the National Forest Service in the supervision of deer in the 97,000-acre tract. Judge Meekins said he based his decree upon a special act of the 1915 General Assembly of North Carolina, which granted the Federal Government authority to make "all needful rules and regulations" for the protection of game in Pisgah. The suit resulted when National Forest Service agents attempted to ship deer out of Pisgah to other parks. North Carolina game officials arrested the Federal agents for violating State game laws, and the Federal Government asked that the State be restrained from interference. (A. P.)

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Section 1

November 22, 1939

ROCHESTER Rochester (N.Y.) bankers agreed yesterday to defer
FOOD STAMPS a 1 percent collection charge for handling surplus food stamps, which was to become effective December 1. Roland B. Woodward, vice president of the Chamber of Commerce, who made the announcement after a meeting attended by bankers and food merchants, said the bankers agreed to defer the charges "to enable the grocers committee to perfect its plan and present it to the authorities at Washington." (A.P.)

Secretary Wallace said yesterday: "I am delighted with the statement issued by Mr. Woodward, announcing that the banks have agreed to defer the assessment of a charge for redeeming food stamps...Officials of the Federal Surplus Commodities Corporation will be glad to work with grocers and bankers on mechanics for minimizing the cost of redemption of the stamps. This action by Rochester people will protect small independent merchants." (New York Times.)

ARGENTINE The Argentine government yesterday announced a new
IMPORT BAR import policy, designed to prevent, as far as possible, purchases from any countries except Great Britain and France as long as the present war lasts, says a copyright report to the New York Times from Buenos Aires. The director of the exchange control bureau, Alfredo Louro, stated: "All requests for exchange for importations from other countries of merchandise that can in some form be acquired in Great Britain will be refused."

Louro declared Argentina must increase her dependence upon compensated trade agreements begun by the Roca-Rumanian treaty with Great Britain in 1933 to put into operation the slogan, "buy from those who buy from us." The new policy is a repudiation of the government's declaration of August 23 in connection with the announcement of the intention to negotiate a new trade treaty with the United States.

HUSMANN DIES George C.F. Husmann, 78, one of the nation's outstanding grape authorities, died yesterday at his home in Napa, California, according to word received yesterday in Washington. For 30 years he was a member of the scientific staff of the Agriculture Department as a grape specialist, retiring in 1931. His research resulted in the publication of many papers and scientific articles on grapes. On his retirement he was a pomologist in the fruit and crop section of the Department. (Washington Star.)

N.D. County "The last session of the North Dakota legislature Disorganization passed a law which would enable counties to disorganize their present county governments and to become attached to adjoining organized counties for the performance of essential functions," says Kenneth Wernimont, Bureau of Agricultural Economics, in an article in the National Municipal Review (November). "It is hoped that this will provide a technique by means of which some of the thinly populated counties of the state will be able to cope with a progressively declining tax base and an increasing rate of tax delinquency with the inevitable rise of floating and bonded indebtedness. Maintenance of public offices required by the constitution of the state and statutes dealing with county government is no longer justified in some places, either by numbers of people to be served or by economic ability to pay taxes. There are apparently other counties with the necessary machinery already set up to undertake the performance of minimum functions of local government supervision within the territory to become unorganized..."

State Egg National Poultry Digest (November) contains "Outlaw Legislation Eggs" by O. K. Moore (reprinted from Everybody's Poultry Magazine). The article says in part: "Egg labeling and grading legislation exist in 40 states with no two pieces of legislation alike. Four states--Florida, Georgia, North Carolina and South Carolina--have formulated their laws so that discrimination against out of state eggs forms their basis. These laws have been appropriately termed 'foreign egg' laws. Furthermore, Montana, Arizona and Colorado make some form of discrimination against eggs produced out of state, although their laws are not based upon this factor alone. One state department of agriculture has made the statement that their egg law which discriminates against 'foreign eggs' is made for two purposes: First, to indicate to the purchaser the quality of the eggs on sale; and second, to promote the use of state produced eggs. Eggs sold in Florida, Georgia and Montana produced out of state must be labeled 'shipped' and the name of the state of origin is required, while in North Carolina, South Carolina and again in Florida, the name of the home state must be applied if the eggs are produced within the state...Rhode Island's top grade is termed 'Rhode Island Special' and only R.I. produced eggs may be sold in this grade. Colorado has an embargo law on a specified grade of eggs which serves as a hindrance to trade. The Colorado egg law prohibits eggs grading U.S. Trades from entering the state."

Soil Science A soil science laboratory for citrus growers has been Cooperative established on the campus of Florida Southern College, to serve members of a new organization known as the Soil Science Cooperative. A new building has been erected to house the laboratory and equipment is being installed. Dr. O. C. Bryan, for several years professor of agronomy and soils at the University of Florida, has been appointed director of the laboratory. (Florida Grower, November.)

Land and
Wildlife

Though the Biological Survey was transferred on July 1 to the Department of the Interior, its work will continue to be carried on in close cooperation with plans for a nation-wide agricultural program, says Extension Service Review (November) which contains a short article, "Land Use Considers Wildlife," by Ira N. Gabrielson, chief of the survey. "Other than for the perpetuation of certain wildlife species and to provide a national program for certain forms such as migratory waterfowl," he says in part, "the Federal and State Governments must look to the landowners themselves as the producers of the wild birds and animals...It has been recognized that the conservation of wildlife has a definite place in any program of land use, and great strides have been made in coordinating wildlife needs with other sound land-management practices. Wildlife has been given a permanent place in the revitalized program of land use and land development as envisioned by the Department of Agriculture, and as a result farmers and other landowners are being made more conscious of this factor than they have ever been in the history of the country...The Biological Survey has been requested to take an active part; and we have designated one of our representatives to serve on State land-planning committees in each State. State game departments will also be called into consultation to assist in developing plans and procedures which will be of the most possible benefit..."

Potato
Elevator

Another step to protect the quality of Michigan's huge potato crop is the development of a portable elevator created by the agricultural engineering department at Michigan State College. The model is reducing bruising and other damage, yet handling up to 375 bushels an hour from truck or wagon into storage bin. Recent tests near Rogers City brought approval from growers. The 16-inch rubber belt, 14 feet long, carried potatoes eight feet up into bins. In one short run the rubber-covered rods in the receiving hopper let 85 pounds of dirt slip through to the floor while 65 bushels of potatoes were elevated. Material costs and time used in construction have led to an estimate that the elevator could be constructed by a handy man for around \$100. (Wisconsin Agriculturist and Farmer, November.)

Civil Service
Examination

The United States Civil Service Commission has announced the following examination: No. 122, assembled; Principal Editorial Clerk, \$2,300, Editorial Clerk, \$1,800. Applications must be on file not later than the following dates: (2) December 11, if received from States other than those named in (b), (b) December 14, if received from the following states: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

Cheaper Milk Delivery Hoard's Dairyman (November 25) in an editorial on cheaper milk delivery, says that at Cedar Rapids, Iowa, where the price of milk recently advanced 20 cents a cwt., the first quart costs 10 cents but additional quarts can be purchased for only 6 cents. "This new method of distribution," it says, "is similar to that followed by a milk company of Minneapolis, where the first quart of milk is sold at a higher price and subsequent units for a lower price. In our issue of August 10 we reported the plan of every-other-day delivery of milk... Delivering milk every other day has been made possible because of improved quality of milk, better handling, and better refrigeration. Milk drivers are able to deliver nearly twice as much milk per day which cuts expenses. Decreasing the cost of distributing milk is a problem that cannot be set aside, for the consumer is demanding milk at lower rates. Where prices have been held up, the consumer has dropped away from regular delivery and has been purchasing milk from peddlers and milk stands..."

Labor on SCS Projects "The first soil conservation project set up in the United States on which WPA labor will be used has been given approval," says an editorial in the Farmer-Stockman (November 15). "Men on WPA will be at work in the conservation of soil in the McIntosh county, Oklahoma, conservation district. Now that a policy has been set by the WPA and by the Soil Conservation Service, the way is open for land owners and supervisors in other soil conservation districts to get busy and set up similar projects, provided that a 'memoranda of understanding' exists between the Department of Agriculture and the district to give assistance to the supervisor through the SCS. WPA labor will not be used on any project until approved by the Soil Conservation Service, and the SCS will not approve any project except those set up with the aid of its technicians..."

Quality Plus Apple Club Producing crops grading over 90 percent U. S. No. 1, four Hoosier apple orchards so far have qualified for awards in the Quality Plus Apple Club. Membership in the club, which was formed this past summer, is open to any Indiana apple grower who is a member of the Indiana Horticultural Society and who harvests a minimum of 500 bushels of apples from at least 250 bearing trees with a minimum average yield of two bushels per tree and of varieties which ripen with or after McIntosh. Examination of the contest blocks is conducted by the Federal-State Inspection Service. (American Fruit Grower, November.)

Rural Sales Increase Cumulative rural sales of general merchandise in the first ten months of this year were about 11.5 percent larger than for the same period last year and were 2 percent above the 1937 level, when such sales were the highest since 1929, the Department of Commerce has reported. (Wall Street Journal.)

DAILY DIGEST

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Section 1

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1939 CORN LOAN RATE

The Secretary of Agriculture has announced the government will make loans to farmers on surplus 1939-grown corn at the base rate of 57 cents a bushel. Eligible for loans at this rate will be farmers in the midwestern commercial corn belt who did not plant in excess of this year's Agricultural Adjustment Administration corn-acreage allotments.

The commercial area comprises 586 major corn-producing counties in Iowa, Missouri, Illinois, Indiana, Ohio, Kentucky, Kansas, Nebraska, Michigan, Minnesota, Wisconsin and South Dakota. Elsewhere loans will be made at 75 percent of the base rate, or 43 cents a bushel, to farmers who did not plant in excess of their AAA soil-depleting acreage allotments.

The base rate will apply on corn with a moisture content of not more than 20 1/2 percent. The loans will be available from December 1 this year to March 31, 1940, and will be due August 1, 1940. The loans will bear 3 percent interest. Farmers may obtain loans through their local banks. The latter institutions may discount such loans with the Federal Commodity Credit Corporation. (A.P.).

AGRICULTURE

The National Grange yesterday asked that agriculture be accorded full representation on the boards, bureaus and commissions set up under the industrial mobilization plan, which directly or indirectly calls for patrol and regulation of the civilian population during an emergency due to imminence of war or in time of war. It stated that agriculture was accorded no voice in the deliberations of the war policies commission, which set up the plan.

In another resolution the Grange, which represents more than 800,000 farmers, advocated liberalization of railroad regulations "so far as it can safely be done without jeopardizing public interest" as a means of equalizing competitive conditions among common carriers. The method, the Grange said, would constitute a more enlightened approach to the "solution of transportation problems than to impose unnecessary regulation on motor and water transport, in order to equalize competitive conditions for the benefit of rail carriers." (A.P.)

INTERSTATE TRADE

Secretary Hopkins yesterday proposed the formation of an interdepartmental committee to study and coordinate government activities in combating inroads to the free flow of commerce resulting from interstate trade barriers. He wrote to the heads of the Departments of State, Labor, Agriculture and Justice and the National Resources Committee. (New York Times)

Fuels from Although the Department of Agriculture is very much
Farm Products interested in the possibilities of utilizing excess farm
 crops as raw materials for industry, many of the proposed
industrial uses for crops constitute economic border line problems at
present, due to our national wealth of cheap raw materials, says P. Burke
Jacobs, Bureau of Agricultural Chemistry and Engineering, in a paper in
Agricultural Engineering (November). "Among the many possible industrial
applications," he says, "the most outstanding possibility is the produc-
tion of alcohol from carbohydrate materials for use as an ingredient of
motor fuel, since no other suggested industrial use approaches this one
in potentiality, both in respect to the quantities of crops which might
be thus absorbed without serious disturbance to existing industries, and
the benefits that might indirectly return to agriculture. Here the mar-
ket is large enough, and flexible enough, to meet the requirements of an
agricultural disposal theory. Power alcohol proponents have made the
most of this fact. Probably the only industry likely to be specifically
affected by a power alcohol development will be the petroleum industry...
We now consume about 1,200,000,000 barrels of crude petroleum annually,
and we have 15 to 20 years' supply in sight. Much can happen in 20 years.
It would seem that the petroleum industry is now entering an era of waste
conservation, whereby more efficient pumping and refining methods and use
of waste gases as sources of synthetic fuels are increasing the poten-
tialities represented in our known national oil reserves..."

Poultry The National Poultry Digest (November) contains a
Improvement condensation of a talk by Berley Winton, Bureau of Animal
Program Industry, describing the National Poultry Improvement Plan.
 "Since the plan was placed in operation," he reports,
"organized pullorum-control programs have been started for the first time
in 14 states, hatchery-improvement programs in 10 states, record-of-
performance work in 12 states and flock-improvement work in 8 states."
He also reports that "in 1939, members of the poultry industry in 44
states participated in the program. Two thousand and thirty-eight breed-
ers and commercial hatcherymen with a total hatching capacity of nearly
76 million eggs took part in the plan. More than 42,000 flock owners with
approximately 8 1/2 million breeding birds had their flocks qualified
during the past year to produce suitable hatching eggs for the cooperating
hatcherymen. Three hundred and sixteen flock owners in 35 states par-
ticipated in the U.S. Record of Performance breeding stage in 1939."

Turkey Reports from turkey growers this year indicate that
Supply they plan to market about 22 percent more turkeys than the
 ample supply of last year, but the storage situation has
changed somewhat from former years. "Unquestionably a large part of the
1939 crop will go into storage," says B. H. Bennett, of the Agricultural
Marketing Service, "but this year the storage will be planned in advance
rather than a storage of what cannot be sold at Thanksgiving and Christmas.
There has been such a tremendous improvement in the packing and freezing
of turkeys that frozen turkeys are now in good demand."

All U. S. Every herd of cattle in the United States has now
Herds TB been tested for tuberculosis at least once. This
Tested announcement by the Bureau of Animal Industry assures
 the successful completion of eradicating bovine tuber-
culosis from the United States. Testing the last herd signifies that
all serious opposition which has hampered official tuberculin testing
in various parts of the country has been overcome. Much retesting
still remains to be done, but the most difficult obstacles in the cam-
paign, which has been in progress since 1917, have now been surmounted.

The last herd to receive its initial test was in Stanislaus County,
California. In recent months the principal zone of activity against
bovine tuberculosis has been in a group of six counties in central Cali-
fornia. All other counties in the State and in the United States have
already qualified as "modified accredited areas" which signifies that
the extent of the disease in all cattle in the area has been reduced to
less than one-half of 1 percent and that all reactors have been removed
and slaughtered. Six counties in California have not yet qualified as
modified accredited areas.

During the Nation-wide campaign more than 220,000,000 tuberculin
tests have been applied. This number represents numerous retests and,
of course, changes in the herds resulting from births, deaths, and
sales of animals. During the steady reduction of the disease through
systematic testing and removal of reactors, approximately 3,750,000
cattle have been slaughtered. The tuberculosis-eradication campaign is
the largest undertaking of its kind in the annals of agriculture and the
veterinary profession.

Frozen Food The importance of rapid freezing of foods and of
Quality the storage of frozen foods at sufficiently low tempera-
 tures to insure maintenance of high quality, especially
in the case of farmers freezing food in cold storage lockers and farm
freezers, was stressed in a report by Dr. K. K. Tressler, chemist at
the N. Y. Experiment Station, Geneva, before a recent meeting of the
American Public Health Association. Farmers should be warned against
packing cabinets or walk-in freezers too solidly with food to be frozen
even where the temperatures are below zero, says Doctor Tressler, who
points out that if the freezer is packed too compactly, slow freezing
will result and vegetables may develop spoilage types of organisms and
lose much of their vitamin C content, while meats may turn rancid and
fruits may discolor. Freezing should be completed within eight hours
or less, he states, and the frozen foods should then be held at zero or
lower to maintain them in prime condition. "Farmers freezing foods in
cold storage lockers and farm freezers seldom are familiar enough with
the principles of preparing, freezing, and storing foods to enable them
to produce foods of first quality," says Doctor Tressler. "In general,
farmers will benefit by preserving food by freezing. The year round

consumption of frozen meats, poultry, fruits, and vegetables will give them a much more varied diet and one which will be higher in vitamin C and certain other food factors than they have had in the past. The benefits to be derived from the general adoption of freezing preservation of foods far outweigh possible hazards." (Fruits Products Journal, November.)

Drought Report

Beneficial rains occurred in some south-central portions of the country, notably in Missouri, Arkansas, eastern Oklahoma, and eastern Kansas. The amounts were of considerable help in conditioning the topsoil, but the subsoil moisture continues deficient and more soaking rains are urgently needed. Substantial rain was also noted along the Gulf coast, bringing appreciable relief to portions of the Southeast and some east Gulf States, but in this area it is still too dry and more moisture is needed. Other than the above-mentioned areas, there was no material addition to soil moisture during the week, although light to moderate falls were reported in parts of the Ohio Valley and other sections. In general, the drought continues unrelieved in most areas from west-central Texas northward and northwestward, making continued unfavorable conditions for winter grains. The winter-wheat situation from the lower Missouri Valley eastward shows some improvement, but in most western portions no appreciable change is noted from last week. (Weather & Crop Bulletin.)

Surplus Food for Children

Free lunches for thousands of undernourished and underprivileged children were started last year when the Federal Surplus Commodities Corporation decided to turn a share of its purchases into school channels, says the Farm Journal and Farmer's Wife (December). "At term's end in June, 800,000 children were receiving healthy free lunches. This year, 900,000 children were listed for the plan the day the doors opened. Before spring, officials hope to have 5,000,000 youngsters eating the canned citrus, corn puddings, graham and white breads, milk and apples that FSCC has. Chicago initiated the commissary scheme being adopted by many large cities. By the time school opens WPA workers have prepared one hot dish, a wrapped sandwich, fruit and a dessert for each child entitled to receive it. The foods are packed in sterilized cans and delivered to each school by trucks. In rural areas, Grange, Farm Bureaus, church societies and Legionnaires donate their time to help in preparing the foods each morning. California has a new law enabling school boards to levy extra taxes to buy free lunches for children from low-income families..."

Food Stamps

Secretary Wallace has announced that the food stamp plan will be extended to Wichita County, Texas, including the city of Wichita Falls. The 1930 census gives the population of Wichita County as 74,416, with 43,690 in Wichita Falls. There are about 3,750 relief cases in the area, representing approximately 12,750 individuals.

DAILY DIGEST

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CORN ACREAGE

ALLOTMENT

A corn acreage allotment of 36,638,000 acres for 1940 and a commercial corn area consisting of 599 counties in the twelve Corn Belt States have been announced by the Department of Agriculture. The area contains thirteen new counties in six states, due to increases in their total corn production in recent years. The allotment is 4,618,000 acres smaller than that for this year, but to help farmers make the additional sacrifice required in complying with the smaller allotments, the rate of conservation payments which may be earned for planting within their 1940 allotments has been increased about 11 per cent.

The national soil-depleting goal for corn under the 1940 program will be between 88,000,000 and 90,000,000 acres, compared with the 1939 goal of 94,000,000 to 97,000,000 acres. This goal includes the acreage outside the commercial area, where corn is grown largely for home consumption, plus the allotment in the high-yielding commercial area from which the nation's surplus corn normally is produced. Department officials said that even though the disappearance of corn is expected to be greater in 1939-40 than it was last year the abundant supply in the ever-normal granary and the increasing yields indicate that adequate supplies can be readily provided from the smaller acreage next year. (New York Times.)

SPRING WHEAT

INSURANCE

The Federal Crop Insurance Corporation today announced February 29 as the deadline for acceptance of applications for "all-risk" insurance on the 1940 spring wheat crop.

The closing date applies to receipt of completed and paid-up applications in county AAA offices. Under the 1940 program, premiums for the insurance must be paid at the time the application is completed. The grower may pay his premium with wheat, cash or by an advance against future payments to be earned under the AAA program. Payments in wheat are made by delivering an acceptable warehouse receipt for wheat, equivalent to the amount of wheat called for by the premium.

Corporation officials anticipate a substantial increase in the amount of insurance written in the spring wheat belt. During the 1939 program, spring wheat policies made up approximately 60,000 of the total of 165,000 policies issued. As of November 9 more than 302,000 paid-up applications had been received, mostly from winter wheat growers. Growers taking out this insurance have paid premiums amounting to 11,074,000 bushels, to insure 83,198,000 bushels on an estimated 8,600,000 acres.

**Insulation
and Heater**

Adequate insulation of a house against heat loss can cut the fuel bill nearly in half, E. S. Draper, director of TVA's department of regional planning studies, reported recently. Mr. Draper announced at the same time that a simple heater practical for central heating of small houses, improved after tests in a TVA house at the Gilbertsville Dam construction community, is now in production for the open market.

The insulation studies were carried out in two identical four-room houses in the Hiwassee Dam construction community. One of them was insulated throughout by wool bats in the walls and over the ceiling and an insulation board under the floor joists. Both houses had both doors weatherstripped. Both families were held to the same schedule of window-opening in bedrooms at night, windows closed by day, and the heaters were turned on and off at the same times. The reduction in total heat loss in the insulated house was 44.75 Percent. Cost of insulation, including labor and materials, was about \$200.

The simple heater described by Mr. Draper was designed to effect a reduction in the capital cost of central warm air heating over that of installing the warm air furnaces then available on the market. The object was to have a primary heat source (without provision for air filtering or humidification) placed in an exceptionally small first floor heating chamber centrally located so that it might service all rooms of a small house without the usual extensive system and basement. (Science News Letter, November 25.)

Paper Profits

"Two years ago the South had only about 8 percent in the South of the country's paper mills and 16 percent of the pulp mills," says an editorial in the Dallas Semi-Weekly News, "but today more than \$100,000,000 is being spent in the South on construction of pulp and paper mills and developments connected with the industry, such as purchase of forests, improvement of harbors and construction of quarters for workmen and their families. This industry is giving a new home outlet for southern capital and promises jobs for thousands of workers. The South has about 130,000,000 acres covered with pine. These trees grow so rapidly that, under scientific management, a new crop can be harvested every fifteen years. With the abundant rainfall of the piney woods region, the trees grow readily on soil that has little value for raising field crops. There is no danger of overproduction, since we now have to import large quantities of pulp and paper...If proper conservation measures are used in growing the pines on a basis of recurrent crops, the South's new pulp and paper development should result in a new major industry of permanent importance."

Boll Worm
Conference

Declaring the pink boll worm infestation in the Rio Grande valley "threatens the entire cotton belt of the United States," Dr. Lee A. Strong, chief of the Bureau of Entomology and Plant Quarantine, has called a conference for December 15 at San Antonio, Texas, to discuss control measures. Despite suppressive steps, Doctor Strong said the pink boll worm population in that area has been increasing since 1936. "The most effective way to suppress the pink boll worm," he said, "is the elimination of all cotton plants from the infested area for one year and in some cases two years. The cost of such a program or an alternative program of continued cleaning of the fields in the South Texas infested areas means huge outlays of federal and state funds." (New Orleans Times Picayune.)

Sheep Ranch
Prospects

"There is a feeling of optimism on the western sheep ranch as winter approaches," says an editorial in the Great Falls Tribune. "Our flockmasters in Montana, as a rule, will enter the winter with good reserves of feed and with ranges in good shape. They are well prepared for that long season and physical conditions in the field are promising. Flocks have been built up that a few years ago were badly depleted and livestock generally are in good condition for another year. In the markets there is no reason for discouragement. The commodity price boom in September has receded somewhat but the wool situation seems favorable for the coming year... The British government has contracted to take all the Australian and New Zealand clips at a fixed price, not only for the duration of the war, but for a year afterwards. They have also agreed to take all South African wool not sold at the African auctions. The agreements are regarded as certain to hold up the world wool price and American producers should profit by that situation as we consume more wool than our own ranches produce."

Grange on
Farm Program

Continued Federal aid to farmers pending the establishment of a permanent agricultural program was urged by the National Grange at the final session of its 71st annual convention, says an Associated Press report from Peoria, Illinois. Delegates representing 800,000 Grange members adopted a committee report which held that Federal benefit payments were justifiable until agriculture is accorded a bigger share of the national income. The report urged adjustments in taxation, interest charges, wage levels and transportation rates to "equalize existing inequalities" for agriculture and proposed both an emergency and a long-time farm program.

The temporary program advocated compensatory payments on domestically consumed portions of export crops to provide parity prices; similar payments for production quotas to be determined on the basis

of land use, acreage, crops and farm equipment; safeguards for tenant interests and continued use of tariff revenue to reduce surpluses at home and abroad. The Grange, opposing any form of processing taxes, recommended that funds for the temporary program should be obtained from tariff revenue, supplemented by excise taxes on manufactured products.

Ten-Month Farm Income American farmers received an estimated cash income of \$6,335,000,000 from marketings and Government subsidies during the first 10 months of this year. Reporting this, the Agriculture Department said income from the same sources during the corresponding period last year was reported at \$6,193,000,000. The farm income from marketings alone during the first 10 months of the year was estimated at \$5,695,000,000, or 2 percent smaller than that for the same months last year. The income from grains, fruits, vegetables and meat animals was larger, but these increases were more than offset by smaller returns from cotton and cottonseed, tobacco, dairy products and poultry products. (Press.)

Waxing of Nectarines Fifty-three cars of waxed nectarines shipped this year by a large California concern as the first commercial test of waxing on this type of fruit were received favorably in eastern markets, according to Dr. L. L. Claypool, assistant professor of pomology of the University of California. The manager of the shipping concern reported to Doctor Claypool that the waxed fruit brought better than average prices and proved generally satisfactory to the trade. Waxing was done by use of a dilute water emulsion of wax applied to the fruit as a mist. Experimental tests carried on by the College of Agriculture led to this year's commercial trial. (California Cultivator, November 18.)

Aluminum Safe for Cooking "The Federal Trade Commission has taken cognizance of rumors as to the injurious effects resulting from the use of aluminum cooking utensils and has filed a complaint against the publisher of the rumor 'tracts', charging that he deceives the public," says an editorial in Scientific American (December). "...The fight against this campaign of fear has gone on for years. Scientific American has patiently explained over and over that aluminum cooking utensils can have no injurious effects on those eating food cooked in them...The American Medical Association, Mellon Institute, Government bureaus, and others have all done their share of the fighting against the rumor..."

Food Stamps Extended Secretary Wallace has announced that the food stamp plan has been extended to Sioux City, Iowa, Shelby County, Tennessee, including the city of Memphis, and Pulaski County, Arkansas, including the cities of Little Rock and North Little Rock.